

## Science Curriculum Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 1</b>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Plants</b></p> <p>The children begin their formal science learning with a knowledge-rich introduction to plants from various habitats and locations.</p>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Animals</b></p> <p>Building on their identification skills from the previous unit, the children use characteristics to identify different types of animals and to compare their structure.</p>	<p style="text-align: center;"><b>Biology</b> <b>Investigating Living Things</b></p> <p>Using their study of plants and animals as a building block, the children identify habitats and needs of animals and plants, describing simple food chains and food sources.</p>	<p style="text-align: center;"><b>Biology</b> <b>The Human Body</b></p> <p>The children will learn to identify basic parts of the human body, and will use their prior learning of animal needs to identify the needs to maintain a healthy body.</p>	<p style="text-align: center;"><b>Physics</b> <b>Sound and Light</b></p> <p>In this unit the children will observe and name different light sources and sound sources, making connections to our senses learned in the previous unit.</p>	<p style="text-align: center;"><b>Chemistry</b> <b>Materials</b></p> <p>Using classification and identification skills from previous units, the children learn to name a variety of materials and describe their properties.</p>
<b>Year 2</b>	<p style="text-align: center;"><b>Chemistry</b> <b>Materials</b></p> <p>Building on their materials learning in Year 1, the pupils will categorise different materials and assess their suitability for various purposes.</p>	<p style="text-align: center;"><b>Physics</b> <b>The Earth in Space</b></p> <p>In their introduction to the Earth's planetary changes, the children will study the seasons and grow their knowledges of seasonal changes across the globe.</p>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Plants</b></p> <p>The children will build on their previous knowledge of plant types, now investigating how plants grow from bulbs and seeds, and the changes that occur in their life cycles.</p>	<p style="text-align: center;"><b>Physics</b> <b>Electricity and Circuits</b></p> <p>In an introduction to electricity, the children will identify appliances that run on electricity, and create their own basic circuits to understand the flow between cell and bulb.</p>	<p style="text-align: center;"><b>Biology</b> <b>The Human Body</b></p> <p>The pupils will extend their learning on different parts of the body, and importance of diet and exercise, before identifying inheritance and the ways in which humans are similar our parents.</p>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Animals</b></p> <p>The children will investigate the life cycles of animals, and the ways in which they resemble their parents. They will explore the needs of both animals and humans to remain healthy.</p>
<b>Year 3</b>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Plants</b></p> <p>The children will build on their prior learning, now exploring pollination and the function of the different parts of plants. They will examine how plants interact with animals, and the transport of water within plants.</p>	<p style="text-align: center;"><b>Physics</b> <b>Electricity and Circuits</b></p> <p>The children will build more complicated circuits than in milepost 1, and will learn to use switches. They will identify conductors and insulators and their purpose, and determine what makes a good conductor/insulator.</p>	<p style="text-align: center;"><b>Biology</b> <b>Investigating Living Things</b></p> <p>The children will learn to classify living things using more complex variables, and will explore how changes in habitats can affect the life of plants and animals.</p>	<p style="text-align: center;"><b>Physics</b> <b>Magnets and Forces</b></p> <p>The children will learn the properties of magnets, and the forces that interact between poles. They will classify materials by their response to magnetic attraction, and will make predictions accordingly.</p>	<p style="text-align: center;"><b>Chemistry</b> <b>Rocks and Soils</b></p> <p>The children will group and classify rocks based on their properties and type, then exploring the formation of fossils and soils.</p>	<p style="text-align: center;"><b>Physics</b> <b>Sound and Hearing</b></p> <p>The children will learn about vibration, and will learn to identify how sounds are made at different pitches. They will learn how sounds travels, and the workings of the human ear.</p>
<b>Year 4</b>	<p style="text-align: center;"><b>Physics</b> <b>Light, Shadow and Reflection</b></p> <p>The children will explore reflection and the way light travels, then investigating the formation of shadows and the way shadows change from light direction and proximity.</p>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Animals</b></p> <p>The pupils will build their understanding of the needs of animals, and will create food chains and webs. They will explore the human systems that compose the human body.</p>	<p style="text-align: center;"><b>Physics</b> <b>The Earth, Sun and Moon</b></p> <p>The children will learn about the Earth, Sun and Moon, and their movement within the solar system. They will explore how these movements affect seasons, light, tides and changes.</p>	<p style="text-align: center;"><b>Biology</b> <b>Evolution and Inheritance</b></p> <p>The children will learn about adaptation and inheritance, before exploring how fossils can indicate the patterns of life in the past.</p>	<p style="text-align: center;"><b>Chemistry</b> <b>States of Matter</b></p> <p>The children will learn solids, liquids and gases, and how heating and cooling affects each of these. They will explore the water cycle, including condensation and evaporation.</p>	<p style="text-align: center;"><b>Biology</b> <b>The Human Body</b></p> <p>The pupils will build their understanding of diet and the human system of digestion, and will learn the functions and formation of teeth in the human body.</p>
<b>Year 5</b>	<p style="text-align: center;"><b>Biology</b> <b>Understanding Animals</b></p> <p>The children will focus on the human body, and its process and systems, understanding the effect of medicine and drugs on the body, and the functions of different body systems.</p>	<p style="text-align: center;"><b>Physics</b> <b>Sound and Vibration</b></p> <p>The children will build their understanding of the effects of the strength of vibrations and distance upon the sound made.</p>	<p style="text-align: center;"><b>Chemistry</b> <b>Materials</b></p> <p>The children will test how materials can separated, dissolved or evaporated, through fair tests and investigations.</p>	<p style="text-align: center;"><b>Chemistry</b> <b>Materials</b></p> <p>The children will build their knowledge of materials through investigations of reversible and irreversible change.</p>	<p style="text-align: center;"><b>Physics</b> <b>Forces and Magnets</b></p> <p>The children will learn and tests contact and distance forces, and investigate the effects and properties of magnets.</p>	<p style="text-align: center;"><b>Physics</b> <b>Electricity and Circuits</b></p> <p>The children will build on their learning of circuits, creating technical diagrams and comparing the function of different components relative to the voltage of the power sources.</p>
<b>Year 6</b>	<p style="text-align: center;"><b>Biology</b> <b>Evolution and Inheritance</b></p> <p>The children will build their knowledge of inheritance and adaptation, before learning the process of evolution and the changes to human life and form over millennia.</p>	<p style="text-align: center;"><b>Physics</b> <b>Light and Shadow</b></p> <p>The pupils will learn about the travel of light, and how the human eye works, before developing their understanding of shadows and their formation, including relating this learning to the Earth in space.</p>	<p style="text-align: center;"><b>Biology</b> <b>Investigating Living Things</b></p> <p>The children will compare the life cycles of different types of animal,, explore reproduction in animals and plants, and classify different living things according to complex variables.</p>	<p style="text-align: center;"><b>Physics</b> <b>The Earth in Space</b></p> <p>The children will learn the movements of the Earth and other bodies in the solar system, and the effects upon night and day on Earth.</p>	<p style="text-align: center;"><b>Physics</b> <b>Forces</b></p> <p>The children will investigate gravity and resistance forces, and their effects on bodies. They will test air and water resistance, and conduct experiments to determine their effects on surface area and different designs.</p>	<p style="text-align: center;"><b>Physics</b> <b>Forces (Mechanics, Levers &amp; Pulleys)</b></p> <p>The children will build on their knowledge of forces, investigating how they are transferred through mechanical devices and how mechanisms can distribute force.</p>