



*Roots to Grow and Wings  
to Fly*

# SCIENCE - Curriculum Overview

## KEY STAGE 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y E A R A</b>	<b>Science - Humans</b> <ol style="list-style-type: none"> <li>1. 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> <li>2. notice that animals, including humans, have offspring which grow into adults</li> <li>3. find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> <li>4. describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</li> </ol>		<b>Science - Materials</b> <ol style="list-style-type: none"> <li>1. distinguish between an object and the material from which it is made</li> <li>2. identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>3. describe the simple physical properties of a variety of everyday materials</li> <li>4. compare and group together a variety of everyday materials on the basis of their simple physical properties</li> </ol>		<b>Science - Plants</b> <ol style="list-style-type: none"> <li>1. identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>2. identify and describe the basic structure of a variety of common flowering plants, including trees</li> <li>3. observe and describe how seeds and bulbs grow into mature plants</li> <li>4. find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</li> </ol>	
<b>Y E A R B</b>	<b>Science - Seasonal Change</b> <ol style="list-style-type: none"> <li>1. observe changes across the four seasons</li> <li>2. observe and describe weather associated with the seasons and how day length varies</li> </ol>	<b>Science</b> Working Scientifically (5 different types of enquiry)	<b>Science - Materials</b> <ol style="list-style-type: none"> <li>1. distinguish between an object and the material from which it is made</li> <li>2. identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>3. 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>4. find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</li> </ol>		<b>Science - Living things / habitats</b> <ol style="list-style-type: none"> <li>1. explore and compare the differences between things that are living, dead, and things that have never been alive</li> <li>2. 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</li> </ol>	<b>Science - Animals</b> <ol style="list-style-type: none"> <li>1. identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>2. identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>3. describe and compare the structure of a variety of common animals (fish, amphibians,</li> </ol>

				kinds of animals and plants, and how they depend on each other 3. identify and name a variety of plants and animals in their habitats, including micro-habitats 4. 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	reptiles, birds and mammals, including pets)
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## KEY STAGE 2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Y E A R A</b>	<b>Science - Electricity</b>  Identify common appliances that run on electricity  Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers  Identify whether or not a lamp will light	<b>Science - States of Matter</b>  Compare and group materials together, according to whether they are solids, liquids or gases  Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)	<b>Science - Sound</b>  Identify how sounds are made, associating some of them with something vibrating  Recognise that vibrations from sounds travel through a medium to the ear	<b>Science - Source of Light</b>  Identify how sounds are made, associating some of them with something vibrating  Recognise that vibrations from sounds travel through a medium to the ear  Find patterns between the pitch of a sound and	<b>Science – Plants</b>  Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers  Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant	<b>Science – Living things &amp; habitats</b>  Recognise that living things can be grouped in a variety of ways  Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment  Recognise that environments can change and that this can

	<p>in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery</p> <p>Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</p> <p>Recognise some common conductors and insulators, and associate metals with being good conductors.</p>	<p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>	<p>Find patterns between the pitch of a sound and features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>features of the object that produced it</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it.</p> <p>Recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>Investigate the way in which water is transported within plants</p> <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p>	<p>sometimes pose dangers to living things.</p>
<b>Y E A R  B</b>	<p><b>Science - Rocks</b></p> <p>Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p> <p>Recognise that soils are made from rocks and organic matter.</p> <p>Compare and group together different</p>	<p><b>Science - Working Scientifically</b></p> <p>Ask relevant questions.</p> <p>Plan different types of scientific enquiries to answer questions.</p> <p>Set up simple and practical enquiries, comparative and fair tests.</p>	<p><b>Science - Forces &amp; Magnets</b></p> <p>Compare how things move on different surfaces.</p> <p>Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p>	<p><b>Science - Forces and Magnets</b></p> <p>Compare how things move on different surfaces.</p> <p>Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p>Observe how magnets attract or</p>	<p><b>Science – Skeletons and teeth</b></p> <p>Identify the different types of teeth in humans and their simple functions.</p> <p>Recognise that humans and some other animals have skeletons and muscles.</p> <p>Explain which parts of the skeleton provide</p>	<p><b>Science – Nutrition and digestion</b></p> <p>Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>

	<p>kinds of rocks on the basis of their appearance and simple physical properties.</p>	<p>Make systematic and careful observations using a range of equipment, including thermometers and data loggers.</p> <p>Take accurate measurements using standard units, where appropriate.</p> <p>Record findings using simple scientific language, drawings and labelled diagrams.</p> <p>Record findings using keys, bar charts, and tables.</p> <p>Gather, record, classify and present data in a variety of ways to help to answer questions.</p> <p>Report on findings from enquiries, including oral and written explanations, of results and conclusions.</p> <p>Report on findings from enquiries using</p>	<p>Observe how magnets attract or repel each other and attract some materials and not others.</p> <p>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</p> <p>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</p>	<p>repel each other and attract some materials and not others.</p> <p>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</p> <p>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</p>	<p>support, movement and protection.</p> <p>Compare the ways that the skeletons of different animals provide support, protection and movement.</p> <p>Recognise that humans have different types of teeth.</p> <p>Describe the function of each type of tooth in the human skull.</p> <p>Explain why humans have different types of teeth.</p>	
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		<p>displays or presentations.</p> <p>Identify differences, similarities or changes related to simple scientific ideas and processes.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p>				
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