



# Science Curriculum Overview

	Autumn Term		Spring Term		Summer Term					
Year 1	<p><b><u>Materials Objectives</u></b></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><u>Animals Objectives</u></b></p> <ul style="list-style-type: none"> <li>identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</li> </ul>		<p><b><u>Animals including humans. Objectives</u></b></p> <ul style="list-style-type: none"> <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><u>Plants Objectives</u></b></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><u>Animals Objectives</u></b></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>describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</li> </ul>	
	<p>←————— Seasonal Change —————→</p>									
Year 2	<p><b><u>Living Things &amp; Their Habitats Objectives</u></b></p> <ul style="list-style-type: none"> <li>explore and compare the differences</li> </ul>		<p><b><u>Animals Including Humans Objectives</u></b></p> <ul style="list-style-type: none"> <li>notice that animals, including humans, have offspring,</li> </ul>		<p><b><u>Use of Everyday Materials Objectives</u></b></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> </ul>		<p><b><u>Plants Objectives</u></b></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</li> </ul>			

	<p>between things that are living, dead, and things that have never been alive.</p> <ul style="list-style-type: none"> <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> <p><b>Forest School</b></p>	<p>which grow into adults.</p> <ul style="list-style-type: none"> <li>• find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> </ul> <p>describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>	<ul style="list-style-type: none"> <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>Working Scientifically focus</b></p>	<p>stay healthy</p> <p><b>Working Scientifically focus</b></p>		
<p><b>Year 3</b></p>	<p><u>Animals including humans</u></p> <p>. Can I identify that human and some humans and some</p>	<p><u>Animals including humans</u></p> <p>. Can I identify that animal, including humans, need the right types and</p>	<p><u>Rocks</u></p> <p>. Can I compare and group together different kinds of rocks on the basis of their appearance and</p>	<p><u>Forces</u></p> <p>. Can I compare how things move on different surfaces? . Can I notice that</p>	<p><u>Plants</u></p> <p>. Can I identify and describe the functions of the flowering plant? . Can I explore the</p>	<p><u>Light</u></p> <p>. Can I recognise that they need light in order to see things and that dark is the absence of</p>

	<p>other animals have skeletons and muscles for support and muscles for support, protection and movement?</p>	<p>amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat?</p>	<p>simple physical properties?          . Can I describe in simple terms how fossils are formed when things that have lived are trapped within rock?          . Can I recognise that soils are made from rocks and organic matter?</p>	<p>some forces need contact between two objects but magnetic forces can act a distance?          Can I observe how magnets attract or repel each other and attract some materials and not others?          Can I 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?          . Can I describe magnets as having two poles?          Can I predict whether two magnets will attract or repel each other, depending on which poles are facing?</p>	<p>requirements of plants for life and growth?          . Can I investigate the way in which water is transported within plants?          Can I explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal?</p>	<p>light?          Can I notice that light is reflected from surfaces?          . Can I recognise that light from the sun can be dangerous and that there are ways to protect their eyes?          . Can I recognise that shadows are formed when the light from a light source is blocked by a solid object?          Can I find patterns in the way that the size of shadows change?</p>
<p>Year 4</p>	<p><u>Sound Objectives</u>          I can identify how sounds are made, associating some of them with something vibrating.</p>	<p><u>Electricity Objectives</u>          I can identify common appliances that run on electricity.          I can construct a</p>	<p><u>Animals including humans Objectives</u>          I can describe the simple functions of the basic parts of the digestive system in humans.          I can identify the</p>	<p><u>States of Matter and the Water Cycle Objectives</u>          I can compare and group materials together, according</p>	<p><u>Living things and their habitats Objectives</u>          I can recognise that living things can be grouped in a variety of ways.          I can explore and use classification keys to help group, identify and name a variety of living</p>	

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	<p>I can recognise that vibrations from sounds travel through a medium to the ear. I can find patterns between the pitch of a sound and features of the object that produced it. I can find patterns between the volume of a sound and the strength of the vibrations that produced it. I can recognise that sounds get fainter as the distance from the sound source increases.</p>	<p>simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. I can identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. I can recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. I can recognise some common conductors and insulators, and associate metals with being good conductors.</p>	<p>different types of teeth in humans and their simple functions. I can construct and interpret a variety of food chains, identifying producers, predators and prey.</p>	<p>to whether they are solids, liquids or gases. I can 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). I can identify the part played by evaporation and condensation in the water cycle. I can associate the rate of evaporation with temperature.</p>	<p>things in their local and wider environment. I can recognise that environments can change and that this can sometimes pose dangers to living things.</p>	
<p><b>Year 5</b></p>	<p><b><u>Forces Objectives</u></b> Can I explain that unsupported objects fall towards the Earth because of the force of gravity acting between the</p>	<p><b><u>Materials (Properties) Objectives</u></b> Can I compare and group together everyday materials on the basis of their properties, including</p>	<p><b><u>Animals including humans Objectives</u></b> Can I describe the changes as humans develop to old age?</p>	<p><b><u>Earth &amp; Space Objectives</u></b> Can I describe the movement of the Earth and other planets relative to the sun in the solar</p>	<p><b><u>Materials (Changes) Objectives</u></b> Can I demonstrate that dissolving, mixing and changes of state are</p>	<p><b><u>Living Things &amp; their Habitats Objectives</u></b> Can I describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird?</p>

	<p>Earth and the falling object?</p> <p>Can I identify the effects of air resistance, water resistance and friction, that act between moving surfaces?</p> <p>Can I recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect?</p>	<p>their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets?</p> <p>Can I give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic?</p> <p>Can I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution</p> <p>Can I use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating?</p>		<p>system?</p> <p>Can I describe the movement of the moon relative to the Earth?</p> <p>Can I describe the sun, Earth and moon as approximately spherical bodies?</p> <p>Can I use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky?</p>	<p>reversible changes?</p> <p>Can I explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda?</p>	<p>Can I describe the life process of reproduction in some plants and animals?</p>
<p><b>Year 6</b></p>	<p><b>Light Objectives</b></p> <p>*Recognise that light appears to travel in straight lines.</p> <p>*Use the idea that light travels in straight lines to explain that objects are seen because they</p>	<p><b>Living Things &amp; their Habitats (Classification) Objectives</b></p> <p>*Describe how living things are classified into broad groups according to common observable characteristics and</p>	<p><b>Electricity Objectives</b></p> <p>*Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>*Compare and give reasons for variations in how</p>	<p><b>Evolution Objectives</b></p> <p>*Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth</p>	<p><b>Animals including humans Objectives</b></p> <p>*Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels</p>	

	<p>give out or reflect light into the eye.          *Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.          *Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>	<p>based on similarities and differences, including micro-organisms, plants and animals.          *Give reasons for classifying plants and animals based on specific characteristics.</p>	<p>components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.          *Use recognised symbols when representing a simple circuit in a diagram.</p>	<p>millions of years ago.          *Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.          *Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>and blood.          *Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies' function.          *Describe the ways in which nutrients and water are transported within animals, including humans.</p>	
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