

## Year 3 and Year 4 Science Overview

### Cycle 1- 2025-26

	Autumn 1	Autumn 2	• Spring 1	• Spring 2	• Summer 1	Summer 2
	Ruthless Romans	The railways	Inside Out	Stone Age Rocks	The Amazing Americas	Food, Glorious Food
<b>Y3</b>	<p><b>Rocks</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</li> <li>▪ describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>▪ recognise that soils are made from rocks and organic matter.</li> </ul> <p><b>ENGLISH CROSS CURRICULAR WRITING TO BE COMPLETED</b> information text/different types of rocks</p>	<p><b>Forces and Magnets</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ compare how things move on different surfaces</li> <li>▪ notice that some forces need contact between two objects, but magnetic forces can act at a distance</li> <li>▪ observe how magnets attract or repel each other and attract some materials and not others</li> <li>▪ 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</li> <li>▪ describe magnets as having two poles</li> <li>▪ predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul>		<p><b>Rocks</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ compare and group together different kinds of rocks on the basis of their appearance and simple physical properties</li> <li>▪ describe in simple terms how fossils are formed when things that have lived are trapped within rock</li> <li>▪ recognise that soils are made from rocks and organic matter.</li> </ul>		
<b>Y4</b>			<p><b>Animals inc humans</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>□ describe the simple functions of the basic parts of the digestive system in humans</li> <li>□ identify the different types of teeth in humans and their simple functions</li> <li>□ construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>		<p><b>Electricity</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ identify common appliances that run on electricity</li> <li>▪ construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers</li> <li>▪ identify whether or not a lamp will light in a simple series circuit, based on</li> </ul>	<p><b>Living Things and habitats</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>□ recognise that living things can be grouped in a variety of ways</li> <li>□ explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li> <li>□ recognise that environments can change</li> </ul>

			<p><b>ENGLISH CROSS CURRICULAR WRITING TO BE COMPLETED</b> –Explanation text – How food travels through the body</p>		<p>whether or not the lamp is part of a complete loop with a battery</p> <ul style="list-style-type: none"> <li>▪ recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit</li> <li>▪ recognise some common conductors and insulators, and associate metals with being good conductors.</li> </ul> <p><b>ENGLISH CROSS CURRICULAR WRITING TO BE COMPLETED - investigation based on electricity</b></p>	<p>and that this can sometimes pose dangers to living things.</p> <p><b>Animals inc humans</b> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>□ construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>
<p><b>Y3/4 Ongoing Working scientifically</b></p>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them</li> <li>• setting up simple practical enquiries, comparative and fair tests</li> <li>• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li>• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li> <li>• identifying differences, similarities or changes related to simple scientific ideas and processes</li> <li>• using straightforward scientific evidence to answer questions or to support their findings.</li> </ul>					

	Autumn 1	Autumn 2	• Spring 1	• Spring 2	• Summer 1	Summer 2
	Extreme Earth	Who let the Gods out?	Skeletons and Settlements	Raid, Invade and Stayed	Raging Rivers	Vicious Vikings
Y3		<p><u>Light</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ recognise that they need light in order to see things and that dark is the absence of light</li> <li>▪ notice that light is reflected from surfaces</li> <li>▪ recognise that light from the sun can be dangerous and that there are ways to protect their eyes</li> <li>▪ recognise that shadows are formed when the light from a light source is blocked by an opaque object</li> <li>▪ find patterns in the way that the size of shadows change.</li> </ul>	<p><u>Animals including humans</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</li> <li>▪ identify that humans and some other animals have skeletons and muscles for support, protection and movement.</li> </ul>		<p><u>Plants</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>▪ 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</li> <li>▪ investigate the way in which water is transported within plants</li> <li>▪ explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul>	<p><u>Plants</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</li> <li>▪ 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</li> <li>▪ investigate the way in which water is transported within plants</li> <li>▪ explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</li> </ul>
Y4	<p><u>Sound</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ identify how sounds are made, associating some of them with something vibrating</li> <li>▪ recognise that vibrations from sounds travel through a medium to the ear</li> <li>▪ find patterns between the pitch of a sound and</li> </ul>			<p><u>States of Matter</u> Pupils should be taught to:</p> <ul style="list-style-type: none"> <li>▪ compare and group materials together, according to whether they are solids, liquids or gases</li> <li>▪ observe that some materials change state when they are heated or cooled, and measure or research the temperature</li> </ul>		

	<p>features of the object that produced it</p> <ul style="list-style-type: none"> <li>▪ find patterns between the volume of a sound and the strength of the vibrations that produced it</li> <li>▪ recognise that sounds get fainter as the distance from the sound source increases.</li> </ul>			<p>at which this happens in degrees Celsius (°C)</p> <ul style="list-style-type: none"> <li>▪ identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> </ul>		
<p><b>Y3/4</b>  <b>Ongoing Working scientifically</b></p>	<ul style="list-style-type: none"> <li>• asking relevant questions and using different types of scientific enquiries to answer them</li> <li>• setting up simple practical enquiries, comparative and fair tests</li> <li>• making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</li> <li>• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</li> <li>• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</li> <li>• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</li> <li>• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</li> <li>• identifying differences, similarities or changes related to simple scientific ideas and processes</li> <li>• using straightforward scientific evidence to answer questions or to support their findings.</li> </ul>					