

# Topics – Year 1

	1	2	3	4	5	6	7	8	9	10
Term 1	Plants	Trees	Animals including humans		Human body	Materials	Light	Sound	Electricity	Electricity
Term 2	Plants	Trees	Animals including humans		Human body	Materials	Light	Sound Quiz	Electricity	Quiz
Term 3	Living things	Living things – Habitats				Materials	Light and shadows	Sound Quiz	Electricity	Quiz

## Ongoing Provision

<p>By growing seeds, bulbs and vegetables throughout the year:</p> <p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>	<p>In PE lessons:</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</p>	<p>Through experiment tables set up at various points through the year.</p> <p>Notice how things move, using simple comparisons such as faster and slower.</p> <p>Compare how different things move.</p>	<p>Through a 'daily dashboard', looking at weather and the signs of the season.</p> <p>Observe changes across the four seasons.</p> <p>Observe and describe weather associated with the seasons and how day length varies.</p> <p>Observe the apparent movement of the Sun throughout the day.</p>
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# Topics – Year 2

	1	2	3	4	5	6	7	8	9	10
Term 1	Trees	Animals including humans	Animals including humans	Animals including humans	Living things	Materials	Light	Sound	Electricity	Electricity
Term 2	Plants	Plants	Animals including humans	Animals including humans	Living things	Materials	Earth	Seasons	Electricity	Plants and trees
Term 3	Plants	Plants	The human body	Nutrition	Habitats and adaptations	Materials	Seasons	Habitats	Animals	Nutrition
Ongoing Provision										
Experiment with pushing objects gently and hard. Record and explain what happens.				Experiment with a slope and record how this changes the speed at which an object rolls.				Compare the movement of remote control cars and a helicopter drone. Explain the differences in movement.		

# Topics – Year 3

	1	2	3	4	5	6	7	8	9	10
Term 1	Plants	Living things	Classification key.	Habitats	Food chains	Rocks	Solids, liquids and gases	Forces	Sound	Light
Term 2	Life cycles	Adaptation	Fossils	The Water Cycle	Light	Sound	Magnets	Electricity	Electricity	Earth
Term 3	Muscles	Digestive system	Teeth	Evolution	Soil	Shadows	Electricity	Electricity	Electricity	Earth and moon
<b>Ongoing Provision</b>										
Grow, observe and record the growth of a range of different plants.		Name the different types of nutrition that animals need.  Describe a healthy fraction of the main nutrients for humans.  Name sources of humans' food.		Describe how deforestation is a danger so specific habitats.		Recognise that light from the sun can be dangerous and how to protect your eyes.		Name and describe a variety of plants and animals fossils (note that they inhabited the Earth millions of years ago).  Describe the conditions in which fossils once lived.		

# Topics – Year 4

	1	2	3	4	5	6	7	8	9	10
Term 1	Plants	Living things	Classification	Habitats	Food chains	Rocks	Solids, liquids and gases	Forces	Sound	Light
Term 2	Plants	Nutrition	Fossils	Evaporation	Shadows	Magnets	Magnets	Electricity	Electricity	Earth
Term 3	Muscles	Digestive system	Teeth	Evolution and inheritance	Soil	Electricity		Earth and Moon	Famous scientist	Quiz
Ongoing Provision										
Grow, observe and record the growth of a range of different plants.		Name the different types of nutrition that animals need.  Describe a healthy fraction of the main nutrients for humans.  Name sources of humans' food.		Sound- Explore the effectiveness of different mediums.		Explain how to safely view a solar eclipse.		Categorise, compare and contrast different fossils.		

# Topics – Year 5

	1	2	3	4	5	6	7	8	9	10
<b>Term 1</b>	Evolution and adaptation	Human development	Circulatory system	Lifecycles	Materials	Materials	Forces		Light	Shadows
<b>Term 2</b>	Nutrition	Reproduction	Classification	Filtering, Evaporating, Sieving		Sound		Earth, Sun, Moon		
<b>Term 3</b>	Evolution	Adaptation	Dissolving, Mixing , Reversible changes		Irreversible changes			Electricity		
<b>Ongoing Provision</b>										
Categories, compare and contract different fossils.  Explain fossilisation.		Explain why magnets have poles.  Experiment with cutting magnets in two. Explain and observe what happens.		Potions – Separating salt, sand and gravel (p63).		Bee Watch (page 65)				

# Topics – Year 6

	1	2	3	4	5	6	7	8	9	10
Term 1	Plants	Living things	Heart, exercise, and diet	Lifecycles	Filtering, sieving and evaporation	Materials and their uses.	Magnets	Gravity	Light and shadows.	Earth and Space
Term 2	Nutrients	Classification	Dissolving	Reversible changes	Friction and Drag forces	Light and seeing	Electricity	Electricity	Electricity	Earth
Term 3	Evolution	Adaptation	Materials	Forces and motion	Light	Sound		Sun, Earth and Moon	Earth	Famous scientist
Ongoing Provision										
<p><b>PSHE/PE</b> <b>Diet, exercise and drugs</b></p> <p><b>Advancing-</b> Explain the possible effects of too much sugar in the diet on how the body functions.</p> <p><b>Deep-</b> Argue this statement- You are what you eat?</p>		<p>Explain and discuss the similarities and differences between reproduction in plants and animals.</p>			<p>Categorise and compare fossils.</p> <p>Explain the process of fossilisation.</p> <p>Investigate burning fossil fuels.</p> <p>(p211)</p>		<p>Grouping materials</p> <p>(p14)</p>		<p>Magnets</p> <p>Why do we call the parts of the Earth the North and South Poles?</p> <p>Investigate the Aurora Borealis (link this to magnetism)</p>	

# Breadth

	Key Stage 1	Key Stage 2
Working Scientifically	Pupils use practical scientific methods, processes and skills as detailed in the relevant milestone.	
Biology	<p><b>Plants</b></p> <ul style="list-style-type: none"> <li>• Identify, classify and describe their basic structure.</li> <li>• Observe and describe growth and conditions for growth.</li> </ul> <p><b>Habitats</b></p> <ul style="list-style-type: none"> <li>• Look at the suitability of environments and at food chains.</li> </ul> <p><b>Animals and humans</b></p> <ul style="list-style-type: none"> <li>• Identify, classify and observe.</li> <li>• Look at growth, basic needs, exercise, food and hygiene.</li> </ul> <p><b>All living things</b></p> <ul style="list-style-type: none"> <li>• Investigate differences.</li> </ul>	<p>Plants</p> <ul style="list-style-type: none"> <li>• Look at the function of parts of flowering plants, requirements of growth, water transportation in plants, life cycles and seed dispersal.</li> </ul> <p>Evolution and inheritance</p> <ul style="list-style-type: none"> <li>• Look at resemblance in offspring.</li> <li>• Look at changes in animals over time.</li> <li>• Look at adaptation to environments.</li> <li>• Look at differences in offspring.</li> <li>• Look at adaptation and evolution.</li> <li>• Look at changes to the human skeleton over time.</li> </ul> <p>Animals and humans</p> <ul style="list-style-type: none"> <li>• Look at nutrition, transportation of water and nutrients in the body, and the muscle and skeleton system of humans and animals.</li> <li>• Look at the digestive system in humans.</li> <li>• Look at teeth.</li> <li>• Look at the human circulatory system.</li> </ul> <p>All living things</p> <ul style="list-style-type: none"> <li>• Identify and name plants and animals</li> <li>• Look at classification keys.</li> <li>• Look at the life cycle of animals and plants.</li> <li>• Look at classification of plants, animals and micro-organisms.</li> <li>• Look at reproduction in plants and animals, and human growth and changes.</li> <li>• Look at the effect of diet, exercise and drugs.</li> </ul>

# Breadth

	Key Stage 1	Key Stage 2
Chemistry	<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Identify, name, describe, classify, compare properties and changes.</li> <li>• Look at the practical uses of everyday materials.</li> </ul>	<p><b>Rocks and fossils</b></p> <ul style="list-style-type: none"> <li>• Compare and group rocks and describe the formation of fossils.</li> </ul> <p><b>States of matter</b></p> <ul style="list-style-type: none"> <li>• Look at solids, liquids and gases, changes of state, evaporation, condensation and the water cycle.</li> </ul> <p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Examine the properties of materials using various tests.</li> <li>• Look at solubility and recovering dissolved substances.</li> <li>• Separate mixtures.</li> <li>• Examine changes to materials that create new materials that are usually not reversible.</li> </ul>
Physics	<p><b>Light</b></p> <ul style="list-style-type: none"> <li>• Look at sources and reflections.</li> </ul> <p><b>Sound</b></p> <ul style="list-style-type: none"> <li>• Look at sources.</li> </ul> <p><b>Electricity</b></p> <ul style="list-style-type: none"> <li>• Look at appliances and circuits.</li> </ul> <p><b>Forces</b></p> <ul style="list-style-type: none"> <li>• Describe basic movements.</li> </ul> <p><b>Earth and space</b></p> <ul style="list-style-type: none"> <li>• Observe seasonal changes.</li> </ul>	<p><b>Light</b></p> <ul style="list-style-type: none"> <li>• Look at sources, seeing, reflections and shadows.</li> <li>• Explain how light appears to travel in straight lines and how this affects seeing and shadows.</li> </ul> <p><b>Sound</b></p> <ul style="list-style-type: none"> <li>• Look at sources, vibration, volume and pitch.</li> </ul> <p><b>Electricity</b></p> <ul style="list-style-type: none"> <li>• Look at appliances, circuits, lamps, switches, insulators and conductors.</li> <li>• Look at circuits, the effect of the voltage in cells and the resistance and conductivity of materials.</li> </ul> <p><b>Forces and magnets</b></p> <ul style="list-style-type: none"> <li>• Look at contact and distant forces, attraction and repulsion, comparing and grouping materials.</li> <li>• Look at poles, attraction and repulsion.</li> <li>• Look at the effect of gravity and drag forces.</li> <li>• Look at transference of forces in gears, pulleys, levers and springs.</li> </ul> <p><b>Earth and space</b></p> <ul style="list-style-type: none"> <li>• Look at the movement of the Earth and the Moon</li> </ul> <p>Explain day and night</p>