

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

Breadth

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

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

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
Continuous 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
Continuous 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.		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
Continuous 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
Term 1	Evolution and adaptation	Human development	Circulatory system	Lifecycles	Materials	Materials	Forces		Light	Shadows
Term 2	Nutrition	Reproduction	Classification	Filtering, Evaporating, Sieving			Sound		Earth, Sun, Moon	
Term 3	Evolution	Adaptation	Dissolving, Mixing , Reversible changes		Irreversible changes			Electricity		
Continuous Provision										
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
Continuous Provision										
<p><u>PSHE/PE</u> <u>Diet, exercise and drugs</u></p> <p>Advancing- Explain the possible effects of too much sugar in the diet on how the body functions.</p> <p>Deep- 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>		

School Requirements

