



Whiteshill Primary School

Science Enquiry Questions – 2 Year Rolling Programme

Elm Class					
	Term	Question	NC Unit	NC Outcomes	Equipment & resources
Year A	Autumn 1	Why is a rock a rock?	Everyday Materials	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.</p> <p>Describe the simple physical properties of a variety of everyday materials.</p> <p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p> <p>Asking simple questions and recognising that they can be answered in different way.</p> <p>Observing closely, using simple equipment.</p> <p>Perform simple tests.</p> <p>Identify and classify.</p>	<p>Range of everyday objects in a variety of materials, including rocks.</p> <p>Magnifying glasses.</p> <p>Water trays for simple floating / absorption tests.</p>
	Autumn 2	How does my body heal?	Animals including humans	<p>Describe the importance for humans of hygiene (e-bug and first aid)</p> <p>Asking simple questions and recognising that they can be answered in different way</p>	Concept cartoon?
	Spring 1	Can you grow a plant anywhere?	Plants	<p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p> <p>Asking simple questions and recognising that they can be answered in different way.</p> <p>Observing closely, using simple equipment.</p> <p>Perform simple tests.</p> <p>Use their observations and ideas to suggest answers to questions.</p> <p>Gather and record data to help in answering questions.</p>	<p>Plants of the same variety, size etc</p> <p>Ipads for photos</p> <p>Observation/recording table to complete.</p> <p>Rulers (ensure they know how to use for measuring!)</p>
	Spring 2	Can we shape glass?	Uses of Everyday Materials	<p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>Asking simple questions and recognising that they can be answered in different way.</p> <p>Observing closely, using simple equipment.</p> <p>Perform simple tests.</p>	<p>Modelling clay, balloons, sponges, balls etc solid objects that can be squashed etc</p> <p>Measuring equipment including scales and rulers</p>

				Use their observations and ideas to suggest answers to questions.	Ipads for photos Drawing pencils/paper
	Summer 1	Why don't bridges fall down?	Uses of Everyday Materials	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. Asking simple questions and recognising that they can be answered in different way. Perform simple tests. Identify and classify. Use their observations and ideas to suggest answers to questions. Gather and record data to help in answering questions.	A range of everyday materials, showing what they are used for e.g. a drinks glass compared to a paper cup, a packing box compared to a cereal box etc pictures of houses made from different materials, bridges etc.
	Summer 2	How do we recycle?	Materials, living things and their habitats	Follow up to materials work – link to local community Look at waste, recycling and reusing and the suitability of materials for different jobs – sustainable materials? Asking simple questions and recognising that they can be answered in different way.	
Year B	Autumn 1	Why is a rock not alive?	Living things and their habitats Animals including humans	Explore and compare the differences between things that are living, dead and things that have never been alive. Notice that animals, including humans, have offspring which grown into adults. Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Asking simple questions and recognising that they can be answered in different way. Identify and classify.	
	Autumn 2	Are all animals the same?	Animals including humans	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. Identify and name a variety of common animals that are carnivores, herbivores and omnivores. Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). Asking simple questions and recognising that they can be answered in different way. Identify and classify.	

	Spring 1	Am I a predator?	Living things and their habitats	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. <i>Asking simple questions and recognising that they can be answered in different way</i>	
	Spring 2	What makes a healthy me?	Animals including humans	Describe the importance for humans of exercise and eating the right amounts of different types of food. <i>Asking simple questions and recognising that they can be answered in different way</i>	Stop watches to record times for exercise and/or heart rate.
	Summer 1	Could a polar bear live in Whiteshill?	Living things and their habitats	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. Identify and name a variety of plants and animals in their habitats, including micro habitats. <i>Asking simple questions and recognising that they can be answered in different way.</i> <i>Identify and classify.</i>	Bug hotels or materials to make? Magnifying glasses, ipads for photos. Pictures of ant farms etc

Cross-curricular Links

Year A and B	Autumn, Spring and Summer	Gardening Sessions	Plants	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. Observe and describe how seeds and bulbs grow into mature plants. <i>Asking simple questions and recognising that they can be answered in different way.</i> <i>Observing closely, using simple equipment.</i>
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Maple Class					
	Term	Question	Unit	NC Outcomes	Equipment / Resources
Year A	Autumn 1	Can rocks change?	Rocks	<p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</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 kinds of rocks on the basis of their appearance and simple physical properties.</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>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</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>Rock samples</p> <p>Soil samples</p> <p>Fossil samples</p> <p>Magnifying glasses</p> <p>Water trays to test permeability</p> <p>Sieves for investigating soil samples</p> <p>Ipads for photos</p> <p>Scales, measuring equipment</p> <p>Pencils for drawing observations</p>

Autumn 2	Is the sun plugged in?	Electricity	<p>Identify common appliances that run on electricity. Construct a simple electrical circuit, identifying and naming the basic parts including cells, wires, bulbs, switches and buzzers.</p> <p>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.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</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>Enough working bulbs, switches, wires, batteries, buzzers and motors for at least one between two.</p> <p>Photos of or examples of electrical appliances, including those for entertainment, communication, cooking, safety (e.g. traffic lights) etc</p> <p>Display pictures showing correct symbols for each component of a circuit.</p> <p>Rulers and sharp pencils for scientific drawings of circuits.</p>
Spring 1	Can plants grow in the desert?	Plants	<p>Investigate the way in which water is transported within plants.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p>	<p>White carnations, food dye.</p> <p>Ipads for photos, drawing equipment, measuring equipment, beakers.</p>

Spring 2	Can I ride my bike in the sand?	Forces and Magnets	<p>Compare how things move on different surfaces. <i>Ask relevant questions and using different types of scientific enquiries to answer them.</i> Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence to answer questions or to support their findings.</p>	Ramps, Carpeted ramp / surface Wooden surface Metallic surface Glass surface Plastic surface Small balls, toy cars, marbles etc Stop watches and rulers
Summer 1	Where does my food go?	Animals including humans	<p>Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. <i>Ask relevant questions and using different types of scientific enquiries to answer them.</i> Use straightforward scientific evidence to answer questions or to support their findings.</p>	Skeleton Skull of human / sheep to compare Teeth (as above) Pictures of the above from different types of animals to compare jaws, teeth etc
Summer 2	How do cats eyes keep me safe?	Light	<p>Notice that light is reflected from surfaces. <i>Ask relevant questions and using different types of scientific enquiries to answer them.</i> Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations and, where appropriate, taking accurate measurements using</p>	Torches (with batteries) Mirrors Tin foil and other surfaces eg wooden door, painted wall etc Measuring equipment Pictures of actual cats' eyes & those on roads!

				<p>standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p>	
Year B	Autumn 1	Why can't pigs fly?	Living things and their habitats	<p>Recognise that living things can be grouped in a variety of ways.</p> <p>Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p>	
	Autumn 2	Can I make ice disappear?	States of matter	<p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>Compare and group materials together, according to whether they are solids, liquids or gases.</p> <p>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.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p>	<p>Thermometers,</p> <p>Beakers</p> <p>Materials that can be melted and cooled e.g. chocolate, ice cream, ice cubes, butter</p> <p>ipads for photos</p> <p>spoons</p> <p>A way to show steam and evaporation e.g. photos of thermal pools, candles heating a spoon of water, kettle etc</p> <p>(health and safety!)</p>

				<p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</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>	
Spring 1	Why do we need bees?	Plants	<p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p>		
Spring 2	Does everything I touch really move?	Forces and Magnets	<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 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>Describe magnets as having two poles.</p>	<p>Magnets</p> <p>Metallic objects, as well as non-magnetic objects to test</p> <p>Rulers to measure distance between magnets</p>	

				<p>Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</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>	
Summer 1	How and why does a lion chase it's prey?	Animals including humans		<p>Construct and interpret a variety of food chains, identifying producers, predators and prey.</p> <p>Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p> <p>Describe the simple functions of the basic parts of the digestive system in humans.</p> <p>Identify the different types of teeth in humans and their simple functions.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p>	<p>Skeleton</p> <p>Model of human digestion system</p>

				<p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Use straightforward scientific evidence to answer questions or to support their findings.</p>	
Summer 2	So where did the ice really go?	States of Matter	<p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> <p>Ask relevant questions and using different types of scientific enquiries to answer them.</p> <p>Set up simple practical enquiries, comparative and fair tests.</p> <p>Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Gather, record, classify and present data in a variety of ways to help in answering questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</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>Water beakers</p> <p>Measuring jugs</p> <p>Equipment to recreate the icebergs melting (ice cubes), evaporation of bodies of water, heat source to represent the sun and condensing (cold surface/mirror).</p>	

Cross-curricular Links

Year A and B	Autumn, Spring and Summer	Gardening Sessions	Plants	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
Year A	Year A – Enquiry 2	D&T	Animals including humans	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.

	Year A – Enquiry 1	D&T	Electricity	Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors.
Year B	Year B – Enquiry 1	D&T	Light	Recognise that they need light in order to see things and that dark is the absence of light. Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the size of shadows change.
		Music	Sound	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 features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases.

				Oak Class	
	Term	Question	Unit	NC Outcomes	Equipment / resources
Year A	Autumn 1	Why don't we fall off the Earth?	Forces	<p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</p> <p>Identify the effects of air resistance and water resistance that act between moving surfaces.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	<p>Force meters</p> <p>Stop watches</p> <p>Measuring equipment including beakers, scales and rulers</p> <p>Objects to test air resistance e.g. paper planes, parachutes made from different materials, paper of the same size, materials to make floating vessels.</p>
	Autumn 2	Can I make my heart beat faster?	Animals including humans	<p>Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood.</p> <p>Describe the ways in which nutrients and water are transported within animals including humans.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p>	<p>Stop watches</p> <p>Electronic pulse readers</p> <p>Model of the human circulatory system.</p> <p>Model of the human heart</p>

				Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.	
Spring 1	Can I turn my toast back to bread?	Properties and changes of materials	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. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.	Sliced bread Toaster Kettle (health and safety) Ice, chocolate, candles, matches, butter, cold surface e.g. mirror for condensing, bicarb of soda Beakers Filter paper sieves	
Spring 2	Why do giraffes have long necks?	Evolution and Inheritance	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth 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. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.	Fossil samples and pictures	
Summer 1	Can we be a plastic free school?	Living things and their habitats	Recognise that environments can change and that this can sometimes pose dangers to living things.		

				<p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p><i>Non-statutory: Pupils should explore examples of human impact (both positive and negative) on environments, for example, the positive effects of nature reserves, ecologically planned parks, or garden ponds and the negative effects of population and development, litter or deforestation</i></p>	
	Summer 2	What am I like on the inside?	Animals including humans	<p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	Model of the human body with internal organs and systems.
Year B	Autumn 1	Do all living things lay eggs?	Living things and their habitats	<p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the process of reproduction in some plants and animals.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.</p>	
	Autumn 2	Can I get salt out of the sea?	Properties and changes of materials	<p>Know that some materials will dissolve in liquids to form a solution and describe how to recover a substance from a solution.</p> <p>Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</p>	

				<p>Demonstrate that dissolving, mixing and changes of state are reversible changes.</p> <p>Compare and group together everyday materials on the basis of their properties including their solubility.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.</p>	
	Spring 1	Can we bend the sun's rays?	Light	<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 give out or reflect light into the eye.</p> <p>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.</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p> <p>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>Notice that light is reflected from surfaces.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p>	

			<p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p>	
Spring 2	Why is it night-time in Australia and day-time here?	Earth and Space	<p>Describe the movement of the Earth and other planets, relative to the Sun in the solar system.</p> <p>Describe the movement of the moon relative to the Earth.</p> <p>Describe the Sun, Earth and Moon as approximately spherical objects.</p> <p>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>Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.</p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p>	Model solar system (rotating)
Summer 1	How can we win at Kurling?	Forces	<p>Identify the effects of friction that act between moving surfaces.</p> <p>Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</p> <p>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</p> <p>Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p>Report and present findings from enquiries, including conclusions, causal relationships and explanations of</p>	Surfaces of different materials Toy cars, marbles etc,

				and a degree of trust in results, in oral and written forms such as displays and other presentations.	
	Summer 2	What does a Kangaroo have to do with a common cold?	Living things and their habitats	Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals. Give reasons for classifying plants and animals based on specific characteristics. Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.	Food for moulding (health and safety) Microscope

Cross-curricular Links

Year A and B	Autumn, Spring and Summer	Gardening Sessions	Plants	Explore the requirements for plants for life and growth (air, light, water, nutrients from the soil and room to grow) and how they vary from plant to plant.
Year A	Year A Enquiry 1	D&T	Properties and changes of materials	Compare and group together everyday materials on the basis of their properties including their hardness, transparency and response to magnets. Give reasons based on evidence from comparative and fair tests, for the particular use of everyday materials, including metals, wood and plastic.
	Year B Enquiry 2	D&T	Electricity	Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. Compare and give reasons for variations in how 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. Compare and group together everyday material on the basis of their conductivity (electrical and thermal).
		RE	Evolution and Inheritance	Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

	Spring Term Year 5 – Changing Bodies	PSHE	Animals including humans	Describe the changes as humans develop to old age
	Year B Enquiry 1	D&T	Forces	To recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect