

	Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 1/2</b>	A	<p><b>Living things and their habitats</b> Identify that most living things live in habitats to which they are suited</p> <p>Describe how different habitats provide for basic needs of different kinds of animals and plants, and how they depend on each other</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain Identify and name different sources of food</p> <p>Explore and compare the differences between things that are living, dead, and things that have never been alive</p>		<p><b>Plants</b> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees</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><b>Animals including humans</b> Identify and name a variety of common animals including, fish, amphibians, reptiles, birds and mammals</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p>	<p><b>Seasonal Changes</b> Observe changes across the 4 seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies</p>
<p><b>Longitudinal Study:</b> Steve the Stick Insect. Investigate the local areas- What would a stick insect like? What friends can we find for Steve? Design a habitat for Steve. Mini-beast hunt- have the friends changed? Compare findings. Write a reply to Steve telling him why he should come live at our school.</p>							

	<b>B</b>	<p><b>Everyday materials</b> 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>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for different uses</p> <p>Compare how things move on different surfaces.</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</p>	<p><b>Being Scientists</b> Asking simple questions and recognising that they can be answered in different ways</p> <p>Performing simple tests</p> <p><b>Pushes, pulls and their effects</b></p> <p>How things move</p> <p>How forces can change</p> <p>How things move</p> <p>Making forces bigger</p> <p>Forces change shapes</p>	<p><b>Animals including humans</b> Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>	<p><b>Animals including humans</b> Understand that animals, including humans have offspring which grow into adults</p> <p>Describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Describe the importance for humans to exercise, eating the right amounts of different types of food and hygiene</p>
	<p><b>Longitudinal Study</b> Fairy Garden- Which flowers will make the forest look the nicest? Why would fairies like different flowers? Design a fairy forest. Make and plant the fairy forest. Maintain the forest- what do you have to do to look after the plants? Evaluate the gardens- Which do you think the fairies liked the most and why?</p>				

<b>Year 3/4</b>	A	<p><b>Animals and Humans</b> 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>Construct and interpret a variety of food chains, identifying producers, predators and prey</p>	<p><b>States of Matter</b> 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 (°C)</p> <p>Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</p>	<p><b>All living Things</b> 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>Recognise that environments can change and that this can sometimes pose dangers</p>		<p><b>Animals and Humans</b> 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</p> <p>Identify that humans and some other animals have skeletons and muscles for support, protection and movement</p>	<p><b>Plants</b> Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers</p> <p>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</p>
	<p><b>Longitudinal Study</b> Bug Supermarket. Predictions and checking local area for different minibeasts. Research what they need to survive. Change of season- what will change outside? Design Mini-Beast Hotels. Fruit flies on different colours card- picking the correct colour. Make the hotel.</p>						

	<b>B</b>	<p><b>Rocks</b> 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><b>Forces and Magnets</b> Compare how things move on different surfaces Notice that some forces need contact between two objects, but magnetic forces can act at a distance</p> <p>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet Identify some magnetic materials</p> <p>Describe magnets as having two poles Predict whether two magnets will attract or repel each other, depending on which poles are facing</p>	<p><b>Sound</b> Identify how sounds are made, associating some of them with something vibrating</p> <p>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</p> <p>Find patterns between the volume of a sound and the strength of the vibrations that produced it</p> <p>Recognise that sounds get fainter as the distance from the sound source increases</p>	<p><b>Light</b> Recognise that he/she needs light in order to see things and that dark is the absence of light</p> <p>Notice that light is reflected from surfaces</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect eyes</p> <p>Find patterns in the way that the size of shadows changes</p>		<p><b>Electricity</b> Identify common appliances that run on electricity</p> <p>Construct a simple series electrical circuit, identifying and naming its 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</p>
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**Longitudinal Study**  
 Manage the Meadow.  
 Looking at overgrown areas around the school- what currently lives there?  
 Tally different species of plants and minibeasts.  
 Plan a meadow- what would you include to attract different types of wildlife?  
 Investigation to see how hard-wearing different plants can be.  
 Evaluate and share ideas.  
 Letter to governors- what should we plant around the school and why?

<b>Year 5/6</b>	A	<p><b>Forces</b> Explain that unsupported objects fall towards the earth because of the force of gravity acting between the earth and the falling object</p> <p>Recognise that Some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</p> <p>Identify the effects of air resistance, water resistance and friction that act between moving surfaces</p>	<p><b>Electricity</b> 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 components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</p> <p>Use recognised symbols when representing a simple circuit in a diagram</p>	<p><b>Properties and Changes of materials</b> Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity and response to magnets</p> <p>Recognise that some materials will dissolve in liquid 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><b>Light</b> Recognise that light travels 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>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><b>Living things and habitats</b> Describe the life process of reproduction in some plants and animals</p> <p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</p>
	<p><b>Longitudinal Study</b> Are we all under the same sky? They will make use of first hand and photographic evidence to analyse the phases of the moon, light pollution, and star charts and constellation change. They will make use of a range of equipment to take accurate measurements of shadows, daylight hours, and moon and tide comparatives.</p>					

	<b>B</b>	<p><b>Earth and Space</b> 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 bodies</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><b>Animals including Humans</b> Describe the ways in which nutrients and water are transported within animals, including humans</p> <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>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p>	<p><b>Living Things and Their Habitats</b> Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants and animals</p> <p>Give reasons for classifying plants and animals based on specific characteristics</p>	<p><b>Properties and Changes of materials</b> Give reasons, based on evidence from Comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic</p> <p>Demonstrate that dissolving, mixing and changes of state are reversible changes</p> <p>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><b>Evolution and inheritance</b> Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution</p>
	<p><b>Longitudinal Study</b> Do we all start and end life in the same way? Measuring groups of children throughout the school year and at the end of the year. Compare the growth of the children. Link to work completed in Reception.</p>					