

Science Curriculum Map



	Extra-Curricular	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Reception	Autumn walk Winter walk Spring walk Newby Hall forces Chick incubator	<p style="text-align: center;">Ourselves</p> <p>Senses exploration <i>Can you name the 5 senses and the body parts responsible? Can you think of words to describe these senses?</i></p> <p>Body and facial features <i>Can you name the different body / facial features? How are we all the same? How are we different? How can we group ourselves in ways we are the same / different? What do you use your hands for? What do you use your feet for?</i></p> <p>Growing and changing and how to look after yourself</p> <p><i>How do you know you have grown? What could you do as a baby? What can you do now? What did your parents do for you as a baby and how has that changed now?</i></p>		<p style="text-align: center;">Weather and Winter</p> <p><i>What happens in the 4 seasons? Is the weather the same all over the world? What is ice? Where would it melt quicker? What clothing do you need to wear in Summer / Winter? Why? Which material is the most waterproof? What will blow in the wind and what won't? How do we see in the dark nights? Which are natural light sources and how do the others work? What is electricity and can you make a simple circuit?</i></p> <p style="text-align: center;">Space</p> <p><i>Where is space? What other planets are there? How do you get to space? What's it like in space? How do you live in space? What do you wear to go into space? What jobs do astronauts do?</i></p>		<p style="text-align: center;">Jack and the beanstalk</p> <p><i>What do beans need to help them grow?</i></p> <p><i>How do we plant beans?</i></p> <p><i>What are the different parts of a plant? Can you explain what they do?</i></p> <p style="text-align: center;">Lifecycles</p> <p><i>Can children explain the life cycles of the frog / toad and chicken?</i></p> <p><i>Can children observe and describe what they experience at first hand identifying patterns and changes?</i></p> <p style="text-align: center;">Keeping healthy</p> <p><i>Can children identify healthy / unhealthy food?</i></p> <p><i>Do they understand why we need a balanced diet and what a balanced diet means?</i></p> <p style="text-align: center;">Minibeasts</p> <p><i>Can children name / identify / classify minibeasts?</i></p> <p><i>Can children identify how the minibeast moves?</i></p> <p><i>Can children observe the minibeast in its natural habitat?</i></p>	
Year 1	Dentist/doctor/ paramedic visit Chicks	<p style="text-align: center;">Ourselves</p> <p><i>Can we name our major body parts?</i></p> <p style="text-align: center;">Senses</p>		<p style="text-align: center;">Everyday materials</p> <p><i>What are the properties of everyday materials? Can we group objects and materials based on their physical</i></p>		<p style="text-align: center;">Plants and animals including humans</p> <p><i>How do we group different animals? What are the features of the 5</i></p>	

		<p><i>What are the five senses? How are our body parts linked to our senses?</i></p> <p>Seasonal Changes <i>How does the weather and the environment (trees) change in autumn / winter?</i></p>	<p><i>properties?</i></p> <p>Seasonal Changes <i>How does the weather and the environment (trees) change in late winter and spring?</i></p>	<p><i>vertebrate groups – birds, reptiles, amphibians, mammals and fish? What do animals eat – carnivores, herbivores, omnivores?</i></p> <p><i>Can we name the different parts of a flowering plant (bean diary) and describe in simple terms what they do?</i></p> <p><i>Can we identify 5 common wild / garden flowers? (e.g. daisy, buttercup, dandelion, primrose, daffodil)</i></p> <p><i>What is the difference between a deciduous and evergreen tree?</i></p> <p>Seasonal Changes <i>How does the weather and the environment (trees) change in late spring and summer?</i></p>
<p>Year 2</p>	<p>Harvest assembly Visiting dental hygienist</p>	<p>Animals including humans (Taking Care) <i>What are the basic needs of a human for health and survival? Why do we need a healthy diet, exercise and good hygiene?</i></p> <p>All living things and their habitats <i>What is the difference between things that are dead, living and never lived? What do living things have in common?</i></p> <p><i>What is a habitat? How are living things suited to their habitat? Can we name and describe some animals that live in different habitats?</i></p>	<p>Use of everyday materials <i>How are different materials suited to their use? How can we change the shape of solid objects?</i></p>	<p>Plants (The Apprentice Gardener) Seeds and growing <i>What do seeds and bulbs need to grow into mature plants? How do plants change as they germinate and grow?</i></p> <p>Animals including humans (Growing Up) <i>How do animals change as they grow. What do babies need to develop healthily?</i></p>

		<i>How do animals obtain their food?</i>		
Year 3	Butterfly garden project Tropical World University Science Day	<p>Forces and magnets <i>How does the type and height of surface effect how things move? What materials are magnetic? How do magnets effect each other?</i></p> <p>Light <i>How do we see things? How do different materials effect it's reflective properties? How can we change shadows?</i></p>	<p>Plants <i>What are the different parts and functions of flowering plants? What do different plants needs for life and growth? How is water transported within plants? What part does the flower play in the life cycle of a flowering plant?</i></p> <p>States of matter <i>Solids, liquids and gases. How does heating and cooling change the state of materials? What is evaporation and condensation and how does it link to the water cycle?</i></p>	<p>Animals including humans <i>What do we need to stay healthy? Why do we have a skeleton? How do our muscles help us move?</i></p> <p>Butterfly project <i>What is the life cycle of a butterfly? Observing changes over time and identifying different patterns.</i></p>
Year 4	Allotment Visit from Rainforest explorer	<p>Rocks, fossils and Soils <i>How are fossils formed? What is soil made of? How do we classify different rocks?</i></p> <p>Allotment <i>How does the allotment envt. change in autumn? What parts of the plant to do we eat? What are seeds? Life cycle of a beans and peas.</i></p> <p>Electricity <i>Which common appliances run on electricity? Can you make a complete circuit? Will it light?</i></p>	<p>Sound <i>How are sounds made and changed? What is the relationship between an object and the pitch / volume of the sound it makes? How do sounds travel?</i></p> <p>Allotment <i>How does the allotment envt. change in winter / spring? What is compost made of and how is it made?</i></p>	<p>All living things and their habitats <i>What do all living things have in common? How can we use classification keys to identify rainforest animals? What are food chains?</i></p> <p>Animals including humans (digestive system, teeth and healthy eating) <i>Can we name and describe the function of different teeth? How are animal teeth linked to their diet? Can we name and describe the function of the different parts of the human digestive system?</i></p> <p>Allotment <i>How does the allotment change in</i></p>

		<i>What are switches, conductors and insulators?</i>		<i>late spring / summer? What conditions do seeds need to germinate? How do we care for plants? Harvesting and cooking</i>
Year 5	Seasonal pond project	<p>All living things and their habitats <i>What are the differences of life cycles of mammals, amphibians, insects and birds?</i></p> <p>Forces <i>How does the force of gravity act on falling objects? How does air resistance, water resistance and friction act on objects? How do levers, pulleys and gears effect forces?</i></p> <p>Pond <i>How does the pond envt. change in Autumn? What variety of creatures do we find in the pond when pond dipping? Why does this vary by season?</i></p>	<p>Properties and changes of materials <i>How can we group together materials on the basis of their properties? What is a solution and how can we recover a substance from a solution? How can we separate mixtures? Why do we use certain materials for certain objects? Are dissolving, mixing and changes of state reversible? Which changes are not reversible?</i></p> <p>Pond <i>How does the pond envt. change in Winter/Spring? What variety of creatures do we find in the pond when pond dipping? Why does this vary by season?</i></p>	<p>Earth and space <i>How do the Earth and other planets move relative to the Sun in our solar system? How does the moon move relative to the Earth? Why do we have day and night? Why does the sun seem to move across our sky? Inspirational Female Scientists – Mae Jameson and Catherine Joneson</i></p> <p>Animals including humans -SRE <i>How do humans develop from gestation to old age? What happens to our bodies during puberty?</i></p> <p>Pond <i>How does the pond envt. change in Summer? What variety of creatures do we find in the pond when pond dipping? Why does this vary by season?</i></p>
Year 6		<p>The circulatory system <i>What are the main parts of the human circulatory system? What are the functions of the heart, blood vessels and blood? How are nutrients and water transported within animals.</i></p>	<p>Evolution and inheritance <i>How are living things classified? How having living things on Earth changed over millions of years. Why do offspring have characteristics of their parents. How are plants and animals adapted</i></p>	<p>All living things and their habitats – Pond study <i>What are the different micro habitats in a pond eco system? Which animals live there? Food chains and classification keys.</i></p>

		<p><i>What is the impact of diet, exercise and drugs on our bodies?</i></p> <p>Electricity</p> <p><i>How does changing the number of cells change a circuit? How do switches work? How do we represent different components using symbols.</i></p>	<p><i>to their environment and how does this lead to evolution?</i></p> <p>Light</p> <p><i>What is light and how does it travel? How does the eye see? How are shadows formed?</i></p>	<p>Animals including humans – SRE</p> <p><i>How do humans develop from gestation to old age? What happens to our bodies during puberty?</i></p>
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