

Science	Autumn	Spring	Summer
N/R	<p><u>NURSERY</u></p> <p>Use all their senses in hands-on exploration of natural materials.</p> <ul style="list-style-type: none"> ➤ Provide interesting natural environments for children to explore freely outdoors. <p>Explore collections of materials with similar and/or different properties.</p> <ul style="list-style-type: none"> ➤ Make collections of natural materials to investigate and talk about. ➤ Provide equipment to support these investigations. <p>Talk about what they see, using a wide vocabulary</p> <ul style="list-style-type: none"> ➤ Encourage children to talk about what they see. ➤ Model observational and investigational skills. ➤ Ask out loud: “I wonder if...?” ➤ Plan and introduce new vocabulary, <p>Plant seeds and care for growing plants.</p> <ul style="list-style-type: none"> ➤ Plant seeds and bulbs so children observe growth and decay over time ➤ observe an apple core going brown and mouldy over time <p>Understand the key features of the life cycle of a plant and an animal.</p> <ul style="list-style-type: none"> ➤ help children to care for animals and take part in first-hand scientific explorations of animal life cycles, such as caterpillars or chick eggs <p>Begin to understand the need to respect and care for the natural environment and all living things.</p> <p>Explore and talk about different forces they can feel.</p> <ul style="list-style-type: none"> ➤ Draw children’s attention to forces. ➤ how the water pushes up when they try to push a plastic boat under it • how they can stretch elastic, snap a twig, but cannot bend a metal rod • magnetic attraction and repulsion ➤ Plan and introduce new vocabulary related to the exploration and encourage children to use it. <p>Talk about the differences between materials and changes they notice</p> <ul style="list-style-type: none"> ➤ Provide children with opportunities to change materials from one state to another. cooking – combining different ingredients, and then cooling or heating (cooking) them • melting – leave ice cubes out in the sun, see what happens when you shake salt onto them (children should not touch to avoid danger of frostbite) Explore how different materials sink and float. Explore how you can shine light through some materials, but not others. Investigate shadows. ➤ Plan and introduce new vocabulary related to the exploration and encourage children to use it. <p><u>RECEPTION</u></p> <p>understand the effect of changing seasons on the natural world around them.</p> <ul style="list-style-type: none"> ➤ Guide children’s understanding by drawing their attention to the weather and seasonal features. ➤ Provide opportunities for children to note and record weather. Select texts to share with children about changing seasons. 		

	<p>➤ Throughout the year, take children outside to observe the natural world and encourage children to observe how animals behave differently as the seasons change</p> <p>Look for children independently incorporating their understanding of the seasons in their play. Explore the natural world around them.</p> <p>➤ Provide children with frequent opportunities for outdoor play and exploration.</p> <p>Encourage interactions with the outdoors to foster curiosity and give children freedom to touch, smell and hear the natural world around them during hands-on experiences. Create opportunities to discuss how we care for the natural world around us. Offer opportunities to sing songs and join in with rhymes and poems about the natural world.</p> <p>After close observation, draw pictures of the natural world, including animals and plants.</p> <p>➤ Observe and interact with natural processes, such as ice melting, a sound causing a vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object and a boat floating on water.</p> <p>Describe what they see, hear and feel whilst outside.</p> <p>Encourage focused observation of the natural world. Listen to children describing and commenting on things they have seen whilst outside, including plants and animals.</p> <p>Encourage positive interaction with the outside world, offering children a chance to take supported risks, appropriate to themselves and the environment within which they are in.</p> <p>➤ Name and describe some plants and animals children are likely to see, encouraging children to recognise familiar plants and animals whilst outside.</p>		
1	Ask simple questions, observe closely, perform simple tests, sort and group.		
	Plants and trees	Everyday materials: identifying and properties of materials	Weather and seasons
	Animals including humans: senses, body parts, naming and grouping animals		
2	Use observations to suggest answers, group and classify, perform comparative tests and gather and record data.		
	Uses of everyday materials- comparing uses, changing shape	Animals including humans: basic needs/ exercise	Plants: growing seeds and bulbs
	Living things and their habitats: living, dead, never alive, basic needs and habitats		

3	Ask questions, set up simple enquiry, comparative and fair tests, make careful and systematic observations, use results to draw simple conclusions.		
	Animals including humans: Skeletons, movement, health and nutrition	Rocks and Fossils	Plants: Flowering Life cycle of plant plants/
	Forces and Magnets: Poles/repel	Light: reflection and shadows	
4	Record and report from enquiries, make predictions for new values, draw conclusions, use evidence to answer questions and raise further questions		
	Animals including humans: digestive system/ teeth	Sound: vibration/ pitch/ volume	Living things: classification and environments/ food chain
	Electricity: series circuits/ switches/ conductors	States of matter: evaporation/ condensation	
5	Plan scientific enquiry, recognise and control variables, take measurements, record data and results using scientific diagrams, use test results to set up further enquiry		
	Animals including humans: changes to old age	Properties and changes of materials: dissolving and separating	Earth and Space: Sun/Earth/Moon/ Solar system
	Forces: gravity/ air and water resistance/ friction		Living things and their habitats: lifecycles and reproduction
6	Make predictions, report and present findings, record data and results, identify how scientific evidence is used.		
	Electricity: voltage of cells/ draw circuits with symbols	Living things and habitats: Classification of living things	Evolution and inheritance
	Animals including humans: circulatory system/ drugs and exercise	Light: how light travels/ how we see	