



## Crawley Ridge Infant School – Progression in Science Grid



### (Key Vocabulary, Knowledge and Skills)

#### Spring 2

	Nursery	Year R	Year 1	Year 2
Curriculum Links	<p>Understanding the World</p> <ul style="list-style-type: none"> <li>• Plant seeds and care for growing plants.</li> <li>• Understand the key features of the life cycle of a plant and an animal.</li> <li>• Begin to understand the need to respect and care for the natural environment and all living things.</li> </ul>	<p>Understanding the World</p> <ul style="list-style-type: none"> <li>• Explore the natural world around them</li> <li>• Describe what they see, hear and feel whilst outside.</li> <li>• ELG - Explore the natural world around them, making observations and drawing pictures of animals and plants</li> <li>• ELG - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</li> </ul> <p>Personal, Social, Emotional Development</p> <ul style="list-style-type: none"> <li>• Know and talk about the different factors that support their overall health and wellbeing:               <ul style="list-style-type: none"> <li>– regular physical activity</li> <li>– healthy eating</li> <li>– toothbrushing</li> <li>– sensible amounts of ‘screen time’</li> <li>– having a good sleep routine</li> <li>– being a safe pedestrian</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Pupils describe the simple physical properties of a variety of everyday materials</li> <li>• Pupils compare and group together a variety of everyday materials on the basis of their simple physical properties</li> <li>• Pupils observe changes across the four seasons (ongoing)</li> <li>• Pupils observe and describe weather associated with the seasons and how day length varies. (ongoing)</li> </ul>	<ul style="list-style-type: none"> <li>• Pupils identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses</li> <li>• Find out about people who have developed useful new materials (non-statutory)</li> </ul>

<p><b>Working Scientifically</b></p>		<p>Playing and Exploring</p> <ul style="list-style-type: none"> <li>Respond to new experiences that you bring to their attention.</li> </ul> <p>Creating and thinking critically</p> <ul style="list-style-type: none"> <li>Feel confident about coming up with their own ideas.</li> <li>Make more links between those ideas.</li> </ul>	<ul style="list-style-type: none"> <li>asking simple questions and recognising that they can be answered in different ways</li> <li>observing closely</li> <li>identifying and classifying</li> <li>using their observations and ideas to suggest answers to questions</li> <li>gathering and recording data to help in answering questions</li> </ul>	<ul style="list-style-type: none"> <li>asking simple questions and recognising that they can be answered in different ways</li> <li>observing closely</li> <li>identifying and classifying</li> <li>using their observations and ideas to suggest answers to questions</li> <li>gathering and recording data to help in answering questions</li> </ul>
<p><b>Key Experience</b></p>	<ul style="list-style-type: none"> <li>Looking for Minibeasts</li> <li>Planting/growing experiments.</li> <li>British Science Week – Curiosity: What’s your question? (theme)</li> </ul>	<ul style="list-style-type: none"> <li>Planting beans</li> <li>Spring Walk - Observing signs of Spring</li> <li>Nature Scavenger Hunt</li> <li>British Science Week – Curiosity: What’s your question? (theme)</li> </ul>	<ul style="list-style-type: none"> <li>Seasonal Walks in the woodland and around the grounds (photograph)</li> <li>Weather Investigations – using indoor/outdoor thermometers</li> <li>Materials Investigations – Is it adsorbent? Is it transparent? What is the best material for..?</li> <li>British Science Week – Curiosity: What’s your question? (theme)</li> </ul>	<ul style="list-style-type: none"> <li>Be an Inventor - Design and make a product using reclaimed or recyclable materials</li> <li>British Science Week – Curiosity: What’s your question? (theme)</li> </ul>
<p><b>Key Knowledge</b> <i>To demonstrate their understanding pupils will:</i></p>	<ul style="list-style-type: none"> <li>Name common animals and their young</li> <li>Name common minibeasts</li> <li>Begin to understand that some plants grow from a seed</li> <li>Begin to understand that living things grow</li> </ul>	<ul style="list-style-type: none"> <li>Use key vocabulary to describe the season of spring and changes in the weather associated with spring</li> <li>Begin to understand that bean plants need water, light, soil, air to grow</li> <li>Know that living things grow</li> </ul>	<ul style="list-style-type: none"> <li>Know that different materials have different combinations of properties</li> <li>Use simple vocabulary to describe and compare the physical properties of a given material</li> <li>Explain that waterproof means the ability to stop water passing through it</li> <li>Explain that transparent means the ability to let light pass through so that things can be seen through it</li> <li>Explain that opaque means does not let light pass through it (cannot be seen through)</li> <li>Explain that absorbent means to take up or soak up liquids</li> </ul>	<ul style="list-style-type: none"> <li>Recall key points in the life of chosen inventor</li> <li>Can explain the impact of the invention/material on life today</li> <li>Know that some materials can be recycled and others cannot and identify materials that can be recycled in our local area.</li> <li>Explain how plastic materials can be turned into new products.</li> <li>Give reasons why it is important to recycle and identify hazards presented to the natural world by plastics e.g. Creatures may become trapped in plastic items, creatures may eat plastic and not be able to digest it.</li> </ul>
<p><b>Key Skills</b> <i>To demonstrate their understanding pupils will:</i></p>	<ul style="list-style-type: none"> <li>Match adult animals with their young</li> <li>Draw or make marks to record ideas and observations</li> <li>With support talk about what they have done</li> </ul>	<ul style="list-style-type: none"> <li>Use observations to make drawings of the natural world e.g. plants, flowers</li> </ul>	<ul style="list-style-type: none"> <li>Sort objects into groups according to their properties e.g. shiny, hard, rough</li> <li>Compare materials by their properties saying how they are similar or different</li> </ul>	<ul style="list-style-type: none"> <li>Use a flow chart to record information</li> <li>Sort objects into groups according to given criteria e.g. material, recyclable/non-recyclable etc</li> <li>Record information or data in a table or chart and explain results</li> </ul>

			<ul style="list-style-type: none"> <li>• Use simple equipment such as thermometers to take measurements (ongoing)</li> <li>• Record information or data in a table or chart</li> <li>• Describe observations using key vocabulary</li> </ul>	<ul style="list-style-type: none"> <li>• Perform a simple comparative test</li> <li>• Communicate findings in a range of ways e.g. tables, write up, presentation</li> </ul>
Key Vocabulary	<ul style="list-style-type: none"> <li>• Plant, seed, grow</li> <li>• Animal, adult, baby, names of common animals and their young,</li> <li>• Names of common minibeasts</li> </ul>	<ul style="list-style-type: none"> <li>• Plant, flower, seed, soil, water, light, air, grow</li> <li>• Season, winter, autumn, spring, summer</li> </ul>	<ul style="list-style-type: none"> <li>• Material, object, natural, man-made, wood, plastic, glass, metal, water, rock, brick, paper, fabric</li> <li>• Properties, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, not bendy, waterproof, not waterproof, absorbent, not absorbent, opaque, transparent.</li> <li>• Sort, group, label</li> <li>• Day, year, season, spring, summer, autumn, winter</li> <li>• Weather temperature, thermometer</li> </ul>	<ul style="list-style-type: none"> <li>• Material, Invention, inventors, suitability, properties, raw materials, natural, synthetic</li> <li>• recycle, reduce, reuse, environment, pollution, landfill, waste, durable, reclaimed, recycle, change,</li> <li>•</li> </ul>

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