



## Crawley Ridge Infant School – Progression in Science Grid



### (Key Vocabulary, Knowledge and Skills)

#### Autumn 2

	Year R	Year 1	Year 2
Curriculum Links	ELG - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	<ul style="list-style-type: none"> <li>Pupils identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>Pupils observe changes across the four seasons</li> <li>Pupils observe and describe weather associated with the seasons and how day length varies.</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>Pupils find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>
Working Scientifically	Playing and Exploring <ul style="list-style-type: none"> <li>Respond to new experiences that you bring to their attention.</li> </ul> Creating and thinking critically <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>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>
Key Experience	<ul style="list-style-type: none"> <li>Children to bring in pictures of themselves as a baby</li> </ul>	<ul style="list-style-type: none"> <li>Seasonal Walks in the woodland and around the grounds</li> <li>Weather Investigations – using indoor/outdoor thermometers</li> </ul>	<ul style="list-style-type: none"> <li>Investigation – Suitability of materials</li> <li>Investigation – Applying forces</li> </ul>
Key Knowledge <i>To demonstrate their understanding pupils will :</i>	<ul style="list-style-type: none"> <li>Describe the physical differences between a baby, child and adult</li> <li>Describe one way how they have changed since they were a baby</li> </ul>	<ul style="list-style-type: none"> <li>Know that there are four seasons in a year; Spring (March, April, May), Summer (June, July, August), Autumn (September, October, November), Winter (December, January, February)</li> <li>Know that the number of hours of sunlight is longest in the summer and shortest in the winter. In the UK the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.</li> </ul>	<ul style="list-style-type: none"> <li>Explain that some materials will change shape when a force is applied and identify these materials</li> <li>Explain that some materials do not change shape when a force is applied and will identify these materials, making reference to their properties</li> <li>Understand that some materials can be used to make more than one thing (e.g. plastic can be used to make bags, chairs, cutlery etc)</li> </ul>

		<ul style="list-style-type: none"> <li>• Understand that weather changes with the seasons (In the UK it is usually colder and rainier in winter and hotter and dryer in the summer.)</li> <li>• Explain that some animals (e.g. hedgehogs, dormice, bats) hibernate because of changes in weather.</li> <li>• Explain that some birds migrate because of changes in weather.</li> <li>• Understand that trees can be deciduous or evergreen.</li> <li>• Know that deciduous means they lose their leaves in autumn, and evergreen means they stay leafy all year round.</li> </ul>	<ul style="list-style-type: none"> <li>• Explain why an object is made from a particular material referring to its properties</li> </ul>
<b>Key Skills</b> <i>To demonstrate their understanding pupils will:</i>	<ul style="list-style-type: none"> <li>• Matching</li> <li>• Sorting pictures of activities into activities for a baby and activities for a child (things we can do now)</li> </ul>	<ul style="list-style-type: none"> <li>• Identify common trees and plants, and classify these into deciduous and evergreen</li> <li>• Identify key weather patterns associated with each season.</li> <li>• Interpret information and answer questions from a simple graph</li> <li>• Use simple equipment such as thermometers to take measurements</li> <li>• Record information or data in a table or chart</li> </ul>	<ul style="list-style-type: none"> <li>• Record information or data in a table or chart and explain results</li> <li>• Perform a simple comparative test</li> <li>• Communicate findings in a range of ways e.g. tables, write up, presentation</li> </ul>
<b>Key Vocabulary</b>	<ul style="list-style-type: none"> <li>• Baby, adult, child, grow</li> </ul>	<ul style="list-style-type: none"> <li>• Deciduous, evergreen</li> <li>• Day, year, season, spring, summer, autumn, winter</li> <li>• Weather temperature, thermometer</li> <li>• Hibernate, migrate</li> </ul>	<ul style="list-style-type: none"> <li>• Materials, Natural, synthetic, wood, metal, plastic, glass, brick, rock, paper and cardboard</li> <li>• properties, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, flexible, opaque, transparent, bendy</li> <li>• Twist, bend, stretch, squash, force</li> <li>• test, predict, results, conclusion</li> </ul>

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