



Crawley Ridge Infant School – Progression in Science Grid



(Key Vocabulary, Knowledge and Skills)

Autumn 2

	Nursery	Year R	Year 1	Year 2
Curriculum Links	Understanding the World <ul style="list-style-type: none"> Talk about what they see, using a wide vocabulary. 	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"> Pupils identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Pupils observe changes across the four seasons Pupils observe and describe weather associated with the seasons and how day length varies. 	<ul style="list-style-type: none"> 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 Pupils find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
Working Scientifically		Playing and Exploring <ul style="list-style-type: none"> Respond to new experiences that you bring to their attention. Creating and thinking critically <ul style="list-style-type: none"> Feel confident about coming up with their own ideas. Make more links between those ideas. 	<ul style="list-style-type: none"> observing closely identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions 	<ul style="list-style-type: none"> asking simple questions and recognising that they can be answered in different ways observing closely identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions
Key Experience	<ul style="list-style-type: none"> Exploring seasonal changes 	<ul style="list-style-type: none"> Children to bring in pictures of themselves as a baby 	<ul style="list-style-type: none"> Seasonal Walks in the woodland and around the grounds Weather Investigations – using indoor/outdoor thermometers 	<ul style="list-style-type: none"> Investigation – Suitability of materials Investigation – Applying forces
Key Knowledge <i>To demonstrate their understanding pupils will :</i>	<ul style="list-style-type: none"> Talk about what they see using appropriate vocabulary Describe the weather using simple vocabulary 	<ul style="list-style-type: none"> Describe the physical differences between a baby, child and adult Describe one way how they have changed since they were a baby 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> Explain that some materials will change shape when a force is applied and identify these materials Explain that some materials do not change shape when a force is applied

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