



Crawley Ridge Infant School – Progression in Science Grid



(Key Vocabulary, Knowledge and Skills)

Spring 1

	Year R	Year 1	Year 2
Curriculum Links	<p>Understanding the World</p> <ul style="list-style-type: none"> Explore the natural world around them Describe what they see, hear and feel whilst outside. Recognise some environments that are different from the one in which they live. ELG - Explore the natural world around them, making observations and drawing pictures of animals and plants ELG - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <p>Personal, Social, Emotional Development</p> <ul style="list-style-type: none"> Know and talk about the different factors that support their overall health and wellbeing: <ul style="list-style-type: none"> regular physical activity healthy eating toothbrushing sensible amounts of 'screen time' having a good sleep routine being a safe pedestrian 	<ul style="list-style-type: none"> Pupils distinguish between an object and the material from which it is made Pupils identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Pupils describe the simple physical properties of a variety of everyday materials Pupils compare and group together a variety of everyday materials on the basis of their simple physical properties Pupils observe changes across the four seasons (ongoing) Pupils observe and describe weather associated with the seasons and how day length varies. (ongoing) 	<ul style="list-style-type: none"> Pupils identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Pupils identify and name a variety of plants and animals in their habitats, including microhabitats Pupils describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.
Working Scientifically	<p>Playing and Exploring</p> <ul style="list-style-type: none"> Plan and think ahead about how they will explore or play with objects. Respond to new experiences that you bring to their attention. Make independent choices <p>Creating and thinking critically</p> <ul style="list-style-type: none"> Sort materials. Feel confident about coming up with their own ideas. Make more links between those ideas. 	<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 	<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"> • Making a vegetable stew- keeping healthy • Winter- investigating ice. • Observing the changes in Winter. • Waterproof experiment - what material is best for superhero cape? 	<ul style="list-style-type: none"> • Seasonal Walks in the woodland and around the grounds (photograph) • Weather Investigations – using indoor/outdoor thermometers • Materials Hunt 	<ul style="list-style-type: none"> • Create your own rainforest animal – label adaptations/how it is suited to its environment.
Key Knowledge <i>To demonstrate their understanding pupils will :</i>	<ul style="list-style-type: none"> • Use key vocabulary to describe the season of winter and changes in the weather associated with winter • Know that we need to eat a range of healthy foods to be healthy • Name at least 3 vegetables • Being to understand the term ‘waterproof’ 	<ul style="list-style-type: none"> • Know that wool, wood, cotton, water and rock are natural materials • Know that metal, plastic, glass* are man made materials • Explain where natural materials come from e.g. Wool comes from sheep, Cotton comes from a plant, etc. • Know that the words materials means what an object is made from • Can explain that a property is a feature that a material possesses e.g. it may be hard, soft, shiny, dull etc • Know that different materials have different combinations of properties • Use simple vocabulary to describe the physical properties of a given material e.g. Wood is hard and opaque; Wool is soft; Glass is often transparent. 	<ul style="list-style-type: none"> • Identify and name a variety of habitats e.g. desert, rainforest, woodland, • Explain that a habitat is a place where a plant or animal lives. It provides the plant or animal with its basic needs of food, water and shelter. • Explain that a food chain is a way of showing how nutrients or energy is passed from one living thing to another and must start with a producer • Describe a simple food chain. • Know that different animals and plants live in different places and living things are adapted to survive in different habitats. • Can explain how an animal is suited to its environment by describing its features/adaptations e.g. A spider monkey has long, strong limbs to help it to climb through the rainforest trees; A toucan has a long, large bill to allow it to reach and cut fruit from branches.
Key Skills <i>To demonstrate their understanding pupils will:</i>	<ul style="list-style-type: none"> • Sort foods into two groups healthy/less healthy • Use pictures to record observations • Know what healthy vegetables we can put in a healthy stew • Describe what they see during an experiment 	<ul style="list-style-type: none"> • Identify what material common objects are made from (e.g. wood, plastic, glass, metal, water, or rock) • Sort materials into manmade and natural • Sort objects by their materials • Use simple equipment such as thermometers to take measurements (ongoing) • Record information or data in a table or chart 	<ul style="list-style-type: none"> • Construct a simple food chain with arrows going in the correct direction • Sort and match living things to their habitat
Key Vocabulary	<ul style="list-style-type: none"> • Season, winter, autumn, spring, summer • Hot, cold, frozen, water, liquid, ice, freeze • Healthy, vegetables (name some common vegetables) • Material, waterproof, liquid 	<ul style="list-style-type: none"> • Material, object, natural, man-made, wood, plastic, glass, metal, water, rock, brick, paper, fabric • Properties, hard, soft, stretchy, stiff, shiny, dull, rough, smooth, bendy, opaque, transparent. • Sort, group, label • Day, year, season, spring, summer, autumn, winter • Weather temperature, thermometer 	<ul style="list-style-type: none"> • Habitat, ocean, rainforest, desert, polar region, woodland, seashore, shelter, temperature, conditions, environment • adaptations, features, • Food chain, predator, prey, energy, carnivores, herbivores, omnivores, producer, primary consumer, secondary consumer, diet, • Venn diagram, flow diagram

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