Crawley Ridge Infant School – Progression in Science Grid

(Key Vocabulary, Knowledge and Skills)

Summer 2

	Nursery	Year R	Year 1	Year 2
Curriculum Links	Understanding the World • Explore and talk about different forces they can feel.	Understanding the World • ELG - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	• Pupils observe and describe weather associated with the seasons and how day length varies. (ongoing) • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals • Identify and name a variety of common animals that are carnivores, herbivores and omnivores • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	• 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 notice that animals, including humans, have offspring which grow into adults
Working Scientifically		Playing and Exploring • 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 Creating and thinking critically • Sort materials. • Feel confident about coming up with their own ideas. • Make more links between those ideas.	• 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	• asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions
Key Experience	• Exploring Vehicles	• Investigating Materials: Floating / Sinking, Metallic / non-metallic objects • Investigating Materials: Boat building • Summer Search	• Seasonal Walks in the woodland and around the grounds (photograph) • Weather Investigations – using indoor/outdoor thermometers	• Minibeast Hunt & Choice Chamber • Investigation over time - Does the number of woodlice found in a micro-habitat change?

Key Knowledge *To demonstrate their understanding pupils will :*	• Know the difference between pulls and pulls • Know that we use forces to make things move	• Know that some materials float and others sink • Can name some materials that float • Can name some materials that are metallic	• Explain that carnivores eat other animals, herbivores eat only plants and omnivores eat a mixed diet containing food from both plants and other animals. • Name a range of animals from each of the vertebrate groups • Describe the key features of each vertebrate group e.g. Amphibians are cold blooded animals that live in water and also on land. They lay eggs underwater; Fish have gills to help them breathe, fins to help them swim and scales to protect their bodies • Compare the features of different types of animals	• Identify and describe the conditions in a variety of micro-habitats e.g. leaf litter, log, soil, tree bark, • Explain how the conditions affect the number and type(s) of animals that live there. • Discuss how a minibeast is suited to its environment by describing its features/adaptations e.g. a woodlouse has a flattened segmented body as it is often found under logs or rocks. • Explain that a lifecycle is a way of showing how a living thing grows and changes at different stages of its life • Name and describe distinct stages of growth in a simple life cycle e.g. frog
Key Skills *To demonstrate their understanding pupils will:*	• Talk about what they have observed • Make simple comparisons	• Sort materials into two groups e.g metallic and non-metallic • Discuss the things they have observed	• Sort animals into simple groups e.g. by diet, by features, by type • Can use simple charts etc. to identify unknown animals or classify animals • Use simple equipment such as thermometers to take measurements (ongoing) • Record information or data in a table or chart • Use secondary resources to find out what animals eat	• Construct a simple life cycle to show/describe stages of development in the life cycle of an animal, e.g. frog. • Use a binary tree to identify a minibeast • Use observations to make detailed drawings
Key Vocabulary	• Push, pull, force, move •	• season, winter, autumn, spring, summer • material, float, sink, metallic, non-metallic, metal, plastic, wood, fabric,	• bird, fish, reptile, mammal, amphibian, • features, legs, wings, fur, tail, underwater, air, gills, fins, scales, beaks, claws, feathers • diet, food, carnivores, herbivores and omnivores	• habitat, micro-habitat, leaf litter, log, soil, tree bark, pond, shelter, temperature, conditions, environment • vertebrate, skeleton, invertebrate, minibeast, molluscs, annelids, insects, arachnids. • adaptations, features, • life cycle, young, adult, reproduce, offspring, develop • Venn diagram, flow diagram

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