Progression in Science 2022 – 2023

Strand	Early Years *EYs end points / ELG are covered on more than one occasion throughout the year through enhanced provision	Working Scientifically: During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content: • asking simple questions and recognising that they can be answered in different ways • observing closely, using simple equipment • performing simple tests • identifying and classifying • using their observations and ideas to suggest answers to questions • gathering and recording data to help in answering questions		Year 3
		Year 1	Year 2	
Animals, including humans	**End Points** Explore the natural world around them, making observations and drawing pictures of animals and plants	**End points** 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) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	**End Points** Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat Identify that humans and some other animals have skeletons and muscles for support, protection and movement
	Key vocabulary face, hair, leg, human, knee, animal, arm, fish, elbow, birds, back, head,	**Key vocabulary** head body skeleton limb joint, brain eyelash eye sight pupil, sound ear sign language vibration deafness, tongue mouth	**Key vocabulary** Survival, shelter, nutrition, oxygen, essential, vital, non-essential, survive, grow, healthy, protein, carbohydrate, dairy, vitamins, calcium,	

	toes, ear, hands, eye, fingers, mouth, nose, life cycle	taste flavour sweet, touch fingertips skin organ brain, smell odour nose nostril nose hair fish amphibian reptile mammal bird, feather warm-blooded characteristic backbone hatchling, herbivore carnivore omnivore predator canines, pet wild shelter veterinary natural, similarities differences compare unsuitable climate	fat, balanced diet, freshly cooked foods, pre-cooked, processed foods, exercise, strength, flexibility, balance, co-ordination, hygiene, prevent, germs, bacteria. Life-cycle, grow, survive, independent, adult, foetus, womb, helpless, toddler, develop, offspring, inherit, gene, differences, reproduction, hatchling, chick, bar chart, predict, transformation, frogs spawn, tadpole, froglet	
Living things and their habitats	**End Points** Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class	**End Points**	**End Points** Explore and compare the differences between things that are living, dead, and things that have never been alive 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 Identify and name a variety of plants and animals in their habitats, including microhabitats 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	
	Key vocabulary Investigate, explore, Summer, day, Spring, dark, Autumn, light, Winter, night, Season, Moon, Sun, lighter, darker, shadow, plants, live, alive, home, others, compare, same, different, garden, school, trees, plants, flowers, forest, desert	**Key vocabulary**	**Key vocabulary** Senses, nutrition, reproduce, excrete, respire, habitat, microhabitat, fungi, survive, shelter, antennae, suitable, condition, colony, insect, producer, consumer, herbivore, carnivore, omnivore, food chain, life cycle, nutrients, rot, caterpillar, automated, frozen food, canned, Rainforest, moisture, climate, extinct, endangered, biodiversity, deforestation,	

			poaching, pollution, plankton, ocean, ecosystem, coral reef, trench, arctic, tundra	
Plants	**End Points** Explore the natural world around them, making observations and drawing pictures of animals and plants	**End Points** Identify and name a variety of common and wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees	**End Points** Observe and describe how seeds and bulbs into mature plants Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Investigate the way in which water is transported within plants Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal
	Key vocabulary Tree, petals, trunk, fruit, branch, roots, leaves, flowers, seed	**Key vocabulary** seed plant tree soil predict, stem petal leaf root flower, environment weed daisy dandelion wild¸ deciduous evergreen seasons branch bush, supermarket fruit vegetable farm tractor¸ growth seedling young plant adult plant observe.	**Key vocabulary** Seeds, bulbs, growth, plant, compare, predict, investigate, control, experiment, method, photosynthesis, carbon dioxide, oxygen, glucose, energy, pollination, life cycle, germination, reproduction, seedling, manure, crop, insulate, thrive, healthy, forest, desert	
Materials	**End Points** Use all their senses in 'hands-on' exploration of natural materials.	**End Points** Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties	**End Points** Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	

	Key vocabulary Material, metal, wood, rock, plastic, hard, glass, soft, paper, fabric, material, smooth, shiny, rough, freeze, melt, change, push, pull	**Key vocabulary** material fabric wood plastic metal, object glass property brick elastic, property opaque transparent dull stiff, natural man made factory rubber polyester, predict float sink submerge buoyant, absorbent sponge waterproof umbrella soak, solid strong brick clay wind, waterproof absorbent non-absorbent roof slate, transparent opaque suitable window pane window frame, fabric furniture cotton mattress soft.	**Key vocabulary** Material, property, suitable, object, bridge, triangle, obstacle, structure, construction, stretchy, elastic, floppy, hinder, limit, bend, twist, stretch, squash, force, protective, florescent, safety, waterproof	
Seasonal Changes	**End Points** Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	**End Points** Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies	**End Points**	
	Key vocabulary Summer, day, Spring, dark, Autumn, light, Winter, night, Season, Moon, Sun, lighter, darker, shadow	**Key vocabulary** season spring summer autumn winter, autumn hibernate weather protect harvest, weather frost sleet temperature, compare changes grow chick, warm sun protection temperature heatwave, rainfall measuring record results graph	**Key vocabulary**	