Science

Knowledge and Skills Progression

Progression of Knowledge and Vocabulary				
	Reception	**Year 1**	**Year 2**	**Year 3**
Animals, including humans	• Identify and name different pets and farm animals. • Identify some parts of the human body – facial features, arm, leg, head, neck.	• 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.	• 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 he 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.
		Fish, amphibians, reptiles, birds, mammals, (+ at least 1 example of each), humans, pets, carnivores, herbivores, omnivores, meat, plants, vertebrates, head, neck, shoulders, arms, elbows, wrist, hand, back, chest, hip, legs, knees, ankles, feet, face, ears, eyes, hair, mouth, teeth, tongue, nose, skin, taste, smell, vision/sight, touch, hearing, wing, beak, tail, fin	Y1 Vocabulary + offspring, baby, toddler, child, teenager, adult, elderly, reproduce, life cycle, survival, water, air, food, oxygen, exercise, hygiene, balanced diet	KS1 + skeleton, skull, bones, muscles, movement, support, protection, nutrition

Living things and their habitats	• Explore, name and draw some animals in the surrounding natural environment – minibeasts.		• 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.	
			Living, dead, never alive, habitat, microhabitat, adapt, suited, water, food, air, names of habitats and microhabitats e.g. woodland, meadow, hedgerow, pond, bushes etc, food chain, food source, prey, producer, predator, camouflage, protection	
Seasonal changes	• Play and explore outside in all seasons and in different weather. • Name the four seasons. • Identify the weather associated with each season. • Observe living things (plants and animals)	• Observe changes across the four seasons. • Observe and describe weather associated with the seasons and how the day length varies.		

	throughout the year. • Observe the weather throughout the year.			
		Season, spring, summer, autumn, winter, month, year, day, night, dawn, dusk, sun, earth, moon, daylight, dark, weather, temperature, words associated with the weather e.g. sunny, rain, snow, ice, clouds, fog, wind		
Materials	• Explore and make objects from a range of different materials.	• 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.	• 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 about how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	
		Materials, object, properties, wood, plastic, glass, paper, metal, rock, hard, soft, rough, smooth, shiny, dull, bendy, stiff	Y1 + suitable, brick, fabric, cardboard, elastic, foil, waterproof, absorbent, opaque, transparent, squash, bend, flexible, rigid, strong, weak, twist, stretch push, pull, roll	
Plants	• Explore, name and draw some plants in the surrounding natural environment.	• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. • Identify and describe the basic structure of a variety of	• Observe and describe how seeds and bulbs grow 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

		common flowering plants, including trees.		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.
		Plants, trees, wild, garden, deciduous, evergreen, leaf, flower (blossom), petals, fruit, bulb, seed, roots, stem, trunk, branches, soil	Y1 + seeds, bulbs, growth, reproduction, germinate, conditions, water, light, temperature, reproduce, lifecycle	KS1 + air, water, transportation, nutrients, soil, reproduction, seed formation, seed dispersal, pollination

Working Scientifically Skills (Key Skills)				
	Reception	**Year 1**	**Year 2**	**Year 3**
	• Demonstrate curiosity about the world around them and begin to ask questions. • Use senses and simple equipment to explore the world around them e.g. binoculars, magnifying glasses. • Make direct comparisons. • Identify, sort and group. • Record observations by drawing, taking photographs, using sorting rings etc. • With support, use their observations to suggest answers to questions. • Talk to an adult about what they have found out	• Ask simple questions and recognise that they can be answered in different ways. • Use simple equipment and their senses to observe closely. • Perform simple tests to explore a question or idea. • Identify and classify. • Gather and record data in simple templates to help in answering questions. Including photographs, labelling photographs etc. • Use their observations and ideas to suggest answers to questions.	• Ask simple questions and with support suggest ways to discover an answer, recognising some questions can be answered in different ways. • Use simple equipment to observe closely, including changes over time. • Perform simple comparative tests. • Identify, group and classify. • Gather and record data in appropriate ways to help in answering questions. • Report on and record findings as drawings, photographs, labelled diagrams, orally or in simple prepared tables or charts. • Use their observations and ideas to suggest answers to questions noticing similarities, differences and patterns.	• Ask relevant questions and use different types of scientific enquiries to answer them • Set up simple practical enquiries, comparative and fair tests • Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers • Gather, record, classify and present data in a variety of ways to help in answering questions • Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables • Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions • Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions • Identify differences, similarities or changes related to simple scientific ideas and processes • Use straightforward scientific evidence to answer questions or to support his/her findings