Science Curriculum Skills Progression

		EYFS	Year 1	Year 2	Year 3
Asking simple questions	**Plants**	What plants can you see? Observe and discuss plants in our local environment and those brought into the classroom.	What is a plant? How many types of plant are there?	What do plants need to survive and thrive? How can we grow the tallest plant? Do plants always come from seeds?	How is water transported within plants? What does each part of a plant do? How are seeds dispersed?
	Animals including Humans	Discuss how some animals only eat plants, some only eat meat and other eat a mixture of both. Name and label different parts of your body. Use your senses to explore the world around you.	Discuss, identify and name a variety of common animals that are carnivores, herbivores and omnivores. Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Discuss and explore the basic needs of animals, including humans, for survival (water, food and air) and how they are adapted to do so.	Explore how 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.
	Everyday Materials	Talk about different materials in the environment.	What are objects made from and why?	Which material is the best to use for particular purposes?	Why do objects change state? How can we make them change? What affects do magnets have on materials and how can we manipulate this?
	Seasonal Changes	Asking questions about what can be observed during the seasons as they happen.	What do we expect to change during the change of seasons?		
Performing simple Tests	**Plants**	Growing plants inside the classroom.	Observations are used rather than testing.	Perform tests to find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	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.
	Animals inc humans	Observations are used rather than testing.		Use simple tests to explore the importance of good hygiene for humans.	Investigate how humans need light in order to see things and that dark is the absence of light. (Light)
	Everyday Materials	Use materials for different purposes during play. Plan and make objects.	Perform tests exploring the effectiveness and suitability of certain objects for certain uses e.g. waterproof trousers.	Test the bendiness and stretchiness of different materials.	Explore what happens when light reflects off a mirror or other reflective surfaces. Look for patterns in what happens to shadows when the light source moves or the distance between the light source and the object changes. (Light)

Observing closely, using simple equipment	**Plants**	Observe that plants grow from seeds.	Identify and describe the basic structure of a variety of common flowering plants, including trees. Explore the concept that plants grow from seeds through observations using simple equipment. Observing plants growing over time.	Identify and classify a variety of common, wild and garden plants, herbs bulbs and seeds as well as deciduous and evergreen trees based on set standards and features. Observe and describe how seeds and bulbs grow into mature plants. Identify and name a variety of plants and animals in their habitats, including micro habitats. (habitats)	Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
	Animals including humans	Observe different animals and different settings.	Observe and compare different animals including vertebrates and invertebrates.	Observe behaviour, including eating habits of different animals. Observe and compare the structure of different animals.	Identifying and grouping animals with and without skeletons and observing and comparing their movement. Identify that humans and some other animals have skeletons and muscles for support, protection and movement. Observe and describe how different animals have different habitats based on their location and basic needs. (Habitats)
	Everyday Materials	Observe different materials in the environment.	Distinguish between an object and the material from which it is made.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.	Observing rocks and fossils using a range of equipment. (Rocks) Pupils should explore a variety of everyday materials and develop simple descriptions of the states of matter (solids hold their shape; liquids form a pool not a pile; gases escape from an unsealed container). Pupils should observe water as a solid, a liquid and a gas and should note the changes to water when it is heated or cooled. (States of Matter)
	Seasonal Changes	Observe the different seasons as they change in our environment. Observe and discuss the weather during each season.	Observe and describe weather associated with the seasons and how day length varies. Observe and compare changes across the four seasons.		

Identification n and Classification	**Plants**	Look at flowers in the local environment and the different parts of a flower.	Identify and name a variety of common, wild and garden plants, including deciduous and evergreen trees. Know there are many different kinds of seed some of which come from fruit.	Identifying and classifying bulbs, herbs and seeds.	Investigate the way in which water is transported within plants.
	Animals Including Humans	Identify and group animals based on their geography or cultural acquisition (farm animals, jungle animals, pets, fish, etc).	Identify, group, describe and compare the structure of a variety of animals including fish, amphibians, reptiles, birds and mammals including pets. Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.	Identify and classify animals and plants during the different stages of their life cycle.	Identify and group animals with and without skeletons and observing and comparing their movement.
	Everyday materials	Naming objects and materials in our environment.	Identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock.	Compare and group together a variety of everyday materials on the basis of their simple physical properties.	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. (Rocks)
	Seasons	Identifying the time of year and identifying attributes of that season.	Identify changes in environment during each season.		
Using observations and ideas to suggest answers to questions	**Plants**	Say that if you plant seeds they will grow into plants. Say that we must water plants to keep them alive.	Describe how there are lots of types of plant and they can be found in many different places.	Explain how plants need water, light and a suitable temperature to grow & stay healthy. Explain how animals obtain their food from plants and other animals.	Compare how each seed is suited to each form of dispersal and which one works the most efficiently.
	Animals inc Humans	Say that certain animals live in certain places.	Understand that animals need certain things to stay alive such as food and water.	Explain that humans must maintain a healthy diet, hygiene and exercise to remain healthy.	Compare and contrast the diets of different animals (including their pets) and decide ways of grouping them according to what they eat.
	Everyday Materials	Recognise different materials that they can see in school.	Discuss the different materials around them and what they may be used for.	Explain suitability of materials for different objects based on results of tests.	Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. (Forces and magnets)
	Seasons	Say which season they are in and the different seasons of the year.	Describe the changes in the environment during different seasons.		

Gathering and recording data to help in answering questions	**Plants**	Looking for pants around them and taking photographs, drawing pictures, labelling.	Recording plants found in environment. Timing and observing height of plants & rate at which they grow.	Charting growth/success of plants in different environments and resources used to help plants to grow.	Charting/ Labelling how water is dispersed through a plant.
	Animals including Humans	Discussing pets and types on animals children have seen. Discussing where you are likely to see a certain type of animal.	Bird watching- tallying types of birds seen. Recording trees and plants found on school site on tables.	Recording height of classmates and recording in tables and charts. Identify that most living things live in habitats to which they are suited. (Habitats)	Research different food groups and how they keep us healthy and design meals based on what they find out. Collect information on who eats what type of food and children's preferences.
	Everyday Materials	Finding objects of a certain material and taking photographs / labelling them.	Labelling and grouping materials.	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Find out how far things move on different surfaces and gathering and recording data to find answers their questions. (Forces and magnets)
	Seasons	Discussing seasons.	'Adopting' a tree and recording its changes throughout the school year.		