Year 1 Progression in Science Grid						
Topic	**Animals including humans (Humans)**	**Animals including humans (Animals)**	**Plants**	**Plants**	**Materials**	**Seasonal change**
Prior knowledge	Children will have made observations of animals and will be able to explain why some things occur and talk about changes.		Children will have made observations of plants and will be able to explain why some things occur and talk about changes.		Children know about some similarities and differences between objects and materials.	Know and name the 4 seasons and associate different types weather with the seasons
Prior knowledge for working scientifically	Explore the natural world around them, making observations and drawing pictures of animals and plants. 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. Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.					
Key vocabulary	touch taste hear feel see elbows legs knees face neck head arms ears eyes hair mouth teeth	fish amphibians reptiles birds mammals carnivores herbivores omnivores	common plants wild plants garden plants deciduous evergreen trunk bulb seed vegetables fruit branches leaf root leaves bud flowers stem blossom petals		material properties wood plastic glass metal rock water hard/ soft stretchy/ stiff shiny / dull absorbent/ not absorbent brick paper fabric elastic foil rough / smooth bendy / not bendy waterproof / not waterproof	autumn winter spring summer day night wind rain light dark sunrise sunset hot warm cold snow hail sleet fog sun
Statutory requirements	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. 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 common flowering plants, including trees.		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.	Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.
Key Performance Indicators	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.		I can name the main parts of plants and trees I can identify deciduous and evergreen trees 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 common flowering plants, including trees.		Distinguish between an object and the material from which it is made Describe the simple physical properties of a variety of everyday materials Organise objects or materials into groups	Describe how the weather varies with the season
Essential knowledge	I know … • The head, neck, arms, elbows, legs, knees, and face are body parts.		I know … • Sunflowers, tulips and roses are garden plants • Daises, poppies and bluebells are wildflowers.		I know … • Wood, plastic, glass, metal, water and rock are everyday	I know … • Spring, Summer, Autumn and Winter are the four seasons.

	• Eyes, ears, mouth and teeth are parts of our faces. • Taste, sight, sound, touch and smell are our senses. • Goldfish and sharks are fish • Dogs and humans are mammals; robins and penguins are birds; frogs and newts are amphibians; alligators and snakes are reptiles • Carnivores, like lions, eat meat; herbivores, like giraffes, eat plants; omnivores, like bears, eat meat and plants • How to sort animals into different groups	• Deciduous trees lose their leaves in autumn • Evergreen trees keep their leaves all year round • A flower has petals, a stem, leaves and roots. • A tree has a trunk, branches, leaves, a crown and roots. • How to plant a seed	materials. • Materials have different properties. • How to sort materials according to their properties • How to test the best material for a raincoat	• Some leaves change colour from green in Autumn. • Some trees lose their leaves in Winter and there may be frost. • Fresh buds grow on trees and lambs are born in Spring. • Most trees have green leaves and the days are longer in Summer. • Wearing a hat, sun cream and sunglasses will protect me from the sun. • There are more hours of daylight in the summer than the winter.
Investigations and Working Scientifically to be covered	Investigation – Are older children taller? Gathering and recording data to help in answering questions Observing closely, using simple equipment (tape measure)	Investigation - How can we grow the best plant? The children will carry out an investigation to find out what plants need to grow healthy and make observations about how a plant grows over a number of weeks Performing simple tests Gathering and recording data to help in answering questions Using their observations and ideas to suggest answers to questions	An investigation to find out which material will make the best waterproof coat for teddy – Fair testing Identifying, sorting and grouping materials.	Termly visits to Marshall's Arms to make observations on the Seasons observe changes across the four seasons observe and describe weather associated with the seasons and how day length varies.
KPIs for Working Scientifically	I know … • How to ask simple questions • How to say what might happen in an investigation • How to follow instructions to complete a simple test • How to make observations • How to sort and group objects, materials and living things • How to collect simple data • How to record simple data in a table • How to talk about my findings			
Assessment questions	Can you give examples of: fish; mammals; amphibians; reptiles; and birds? What are is a carnivore? What is a herbivore? What is an omnivore? Can you name some body parts? Can you name our senses? Which parts of our body help us to do these things?	Can you give examples of garden plants? Can you give examples of wildflowers? What are deciduous trees? What are evergreen trees? What are the parts of a flower? What are the parts of a tree? How do you plant a seed?	Can you give an example of an everyday material? What properties does (wood, plastic, glass, metal or rock) have? How can you sort materials based on their properties? How can you test for the best raincoat? Which material would be best for a raincoat and why?	What are the four seasons? What is a sign of Autumn? What is a sign of Winter? What is a sign of Spring? What is a sign of Summer? How can you protect yourself from the sun? How does daylight change throughout the year?