



Science Overview and Progression Grid

F1	<p>Topics to be covered over the year: Signs of Seasons, Ourselves including our senses, Around the world (climates), Growing plants and keeping healthy, animal information (mini beasts (including caterpillar/ frog life cycles/ zoo animals/ farm animals) seaside</p> <p style="text-align: right;"><i>*As a school, we always follow a child's line of enquiry within their learning, which can direct the topics too.</i></p>
Vocabulary	eyes, ears, nose, mouth, hand, sense, healthy, fruit, vegetables, frog, butterfly, cycle, pet, care, kind, winter, summer, autumn, spring
Through Direct Teaching and Continuous Provision	<ul style="list-style-type: none"> ● Senses and body parts through songs ● Healthy eating ● Simple life cycles ● Pets and how to care for them ● Seasons and seasonal changes
By the end of F1 children will be able to:	Begin to understand the need to respect and care for the natural environment and all living things. Use their senses to explore the world around them. Question why things happen, with support. Engage in open-ended activity. Begin to comment on aspects of the natural world.

F1 - Tell me five things!				
I can name 2 ways to stay healthy	What happens when we put two magnets together?	What happens to water when frozen?	What do we use eyes/ears/nose for?	What happens to trees in Autumn/winter/spring?



F2	Topics to be covered over the year: Seasons, The Arctic, Life Cycles, Sea Creatures, Habitats, Plants, Growing <i>*As a school, we always follow a child's line of enquiry within their learning, which can direct the topics too.</i>
Vocabulary	seed, bulb, bud, leaf, shoot, roots, habitat, warm, cold, nest, insect, bird, mammal, float, sink, season, summer, autumn, spring, winter, tree, blossom
Through Direct Teaching and Continuous Provision	Life cycle of a frog, butterfly, bean and chicken What plants need to grow, planting bulbs, sunflowers and daffodils Local wildlife and bird feeders Animals that live in different regions and habitats e.g. polar regions, woodland creatures, sea creatures Through health week they learn about keeping teeth clean and healthy eating Explore a range of different materials through topics and discuss properties soft, hard, bendy Concepts such as floating, sinking, melting discussed regularly through continuous provision Season changes What is ice made of and what happens when we heat it?
By the end of Foundation 2 the children will be able to:	Plant a seed and tell you what it needs to grow. Tell you what they would see in Spring, Autumn, Summer and Winter Name a some mammals and birds Know that animals come from different places. Tell you the simple properties of a material (heavy, light, float, sink, bendy, strong, hard, soft) Name three ways to keep healthy 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.

F2 - Tell me five things!				
Talk about what a plant needs to grow.	Name some animals that live in the sea, pond and woods.	Seasonal changes in winter, autumn, spring and summer.	Name three ways of keeping healthy.	Talk about the life cycle of a chicken.



Year 1	Topics to be covered over the year: Animals Including Humans, Everyday Materials. Plants, Seasonal Changes			
Vocabulary	Animals inc humans: fish, reptiles, amphibians, birds, mammals, feathers, scales, gills, fins, hair, land, water, habitat, backbone, skeleton, carnivores, herbivores, omnivores, senses, touch, smell, hear, taste, see Materials: wood, plastic, metal, glass, rock, brick, fabric, paper, natural, manmade, hard, soft, stretchy/not stretchy, shiny, dull, rough, smooth, transparent, opaque, waterproof Plants: flowers, bushes, trees, roots, stem, leaf, flower, petals, seeds, bulbs, branch, trunk, twigs, deciduous, evergreen Seasonal Changes: seasons, spring, summer, autumn, winter, days, months, years, weather, climate, hot, warm, mild, sunny, cloudy, wind, rain, cold, sleet, snow, hail, thunder, lightning, temperature			
Animals Including Humans	Everyday Materials	Plants	Seasonal Changes	Working Scientifically
Identify and name a variety of common animals including fish, reptiles, amphibians, birds and mammals.	Distinguish between an object and the material from which it is made.	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	Observe changes across the 4 seasons.	Ask and answer simple questions stimulated by observations and exploration of their world
Identify and name a variety of common animals that are carnivores, herbivores and omnivores.	Identify and name a variety of everyday materials including: wood, plastic, glass, metal, water and rock.	Identify and describe the basic structure of a variety of common flowering plants, including trees.	Observe and describe weather associated with the seasons and how day length varies.	Draw on their everyday experiences to help answer questions
Describe and compare the structure of a variety of common animals (fish, reptiles, amphibians, birds and mammals).	Describe the simple physical properties of a variety of every day materials.			Perform simple tests with support and discuss their findings
Identify, name, draw and label the basic part of the human body and say which part of the body is associated with each sense.	Compare and group together a variety of everyday materials on the basis of their simple physical properties.			Record findings in templates provided for them and make simple observations/deductions



Y1 - Tell me 5 things!
Scientific Knowledge (Substantive)

Name the five senses and which body part links to them e.g. eyes=sight, taste=tongue	Name some common materials and can use words like hard, soft, rough, smooth, transparent, waterproof to describe them.	Identify a bird, a fish, an amphibian, a reptile and a mammal	Identify and describe roots, stem, leaves, flowers	Name the four seasons and describe how the weather changes throughout the year
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Vocabulary:
Taste, touch, smell, feel, see
Wood, plastic, glass, metal
Bird, fish, mammal, reptile, bird
Root, stem, leaf, flower
Spring, summer, autumn winter

Y1 - Tell me 5 things!
Scientific Skill (Disciplinary)

I can draw pictures and write labels to show my understanding	I can sort animals into different groups	With support I can put information into a simple table	I can carry out simple tests, with support, and talk about my findings	I can group objects based on its material
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Vocabulary:
Sort Group Test Draw Label



Year 2	Topics to be covered over the year: Animals Including Humans, Living Things and their Habitats, Plants, Materials,			
Vocabulary	<p>Animals inc humans: life cycle, offspring, eggs, caterpillar, pupa, chrysalis, butterfly, frogspawn, tadpole, froglet, frog, baby, toddler, child, teenager, adult, elderly, lamb, ewe, metamorphosis, survival, air, shelter, water, food, exercise, diet, hygiene</p> <p>Everyday Materials: wood, plastic, metal, glass, rock, brick, fabric, paper, bend, stretch, twist, squash, hard, soft, shiny, dull, rough, smooth, transparent, opaque, waterproof</p> <p>Plants: flowers, bushes, trees, roots, stem, leaf, flower, petals, seeds, bulbs, adapt, climate, environment, survival, water, nutrition, light, soil</p> <p>Living things and their habitats: living, not living, habitats, microhabitats, animals, insects, ocean, pond, sea, mangrove, woods, desert, cacti, town, adapted, needs, survival, food chain, producer, consumer, predator, prey, source, carnivore, herbivore</p>			
Animals including humans	Living things and their habitats	Plants	Everyday Materials	Scientific Enquiry
Notice that animals, including humans, have offspring which grow into adults.	Explore and compare the differences between things that are living, dead, and things that have never been alive.	Observe and describe how seeds and bulbs grow into mature plants.	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	Raise questions and use simple secondary sources, e.g. information books, photographs, the internet etc., to find answers.
Find out about and describe the basic needs of animals, including humans, for survival (shelter, water, food and air).	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.	Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	Use simple measurements and equipment to gather data, carry out simple tests, record simple data, talk about <i>what</i> they have found out and <i>how</i> they found it out.
Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Identify and name a variety of plants and animals in their habitats, including microhabitats.			Compare objects, materials and living things and, with help, decide how to sort and group them
	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.			Record and communicate their findings in a range of ways and use simple scientific language.

Y2- Tell me 5 things!
Scientific Knowledge (Substantive)

Name four things that living things need to survive.	Talk about how an animal is suitable for its habitat, for example how a polar bear has adapted to survive in the cold climate	Talk about what plants need to grow and stay healthy	Name some common materials and talk about what they are well suited to be used for.	Describe the main stages of the life cycle of a butterfly.
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Vocabulary:

Air, shelter, water, food
 Animal, habitat, survive, adapt
 Temperature, water, sunlight, soil
 Wood, glass, metal, plastic
 Egg, caterpillar, pupa, butterfly

Y2 - Tell me 5 things!
Scientific Skill (Disciplinary)

I find out answers to questions by looking at information that is presented in different ways	I can sort animals into different groups depending on their habitats	I can carry out simple tests, record my findings and discuss what I have found out	I can organise and record information through drawings, labels, diagrams and writing	I can work effectively with others to investigate and explore the world around me.
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Vocabulary:

Question Group Sort Test Discuss Record Investigate Explore