



Wallace Fields Infant School & Nursery

Science Progression Overview



Science: ELG (UOW)		
<p>Children at the expected level of development will:</p> <ul style="list-style-type: none"> 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. <p style="text-align: center;">Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>		
3-4 years	In Reception	Working Scientifically
<ul style="list-style-type: none"> Explores natural materials. Talks about collections of natural materials. Can talk about what they see using a wide vocabulary. Beginning to understand their own life-story and family's history. Shows an interest in different occupations. Explores how things work. Understands the need to respect and care for the natural environment and all living things. Talk about different forces e.g. how the water pushes when you try to push something down. Can explore how you can shine light through some materials but not others. Can investigate shadows. Explores how different materials sink and float. Understands that materials can change states e.g. cooking and melting. Can talk about the differences they notice between people. Is able to recognise similarities between different communities/families. Can talk positively about people who are different to them. Knows that there are different countries around the world and that we live in England. 	<ul style="list-style-type: none"> Can talk about members of their family. Knows that there are different types of families. Can name and describe people who are familiar to them. Understands how to explore the world around them. Sings songs about the natural world. Can talk about the features of the current season. 	<ul style="list-style-type: none"> Can observe changes over time. Can observe changes and patterns. Can identify and classify. Can perform simple tests with adult support. Can ask simple questions. Can record observations in ways that are important and meaningful to me.
<p>Key Vocabulary:</p> <p>Anchor: family, light, flower, plant, animal, cow, sheep, pig, stick, leaf, hot, cold, rain, snow</p> <p>Goldilocks: grow, sink, float, rock, wood, job, water, family, living, push, pull</p> <p>Step-on: season, spring, summer, autumn, winter, country, England, material, shadow, people, force, melting, cooking, pattern, change</p>		



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Year Group	Plants	Animals Including Humans	Everyday materials	Seasonal Changes	Living things and their habitats	Working Scientifically
Year One	<ul style="list-style-type: none"> I know how to identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. I know how to identify and describe the basic structure of a variety of common flowering plants (including trees) including stem, roots and petals. 	<ul style="list-style-type: none"> I know how to identify and name a variety of common animals including fish, amphibians, reptiles, mammals and birds. I know how to identify and name a variety of common animals that are carnivores, herbivores and omnivores. I know how to describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). RSHEI know how to identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. 	<ul style="list-style-type: none"> I know how to identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. I know how to describe the simple physical properties of a variety of everyday materials. I know how to distinguish between an object and the material from which it is made, describe their properties, identify and group everyday materials based on physical properties. 	<ul style="list-style-type: none"> I know how to observe and describe changes across the four seasons. I know how to observe and describe weather associated with the seasons and how day length varies. I know that it is not safe to look directly at the sun, even when wearing dark glasses. 	N/A	<p>Pupils can:</p> <ul style="list-style-type: none"> Observe changes over time and observe patterns. Identify and classify. Perform simple tests. Perform a fair test with adult support. Ask simple questions and recognise that they can be answered in different ways. Use observations and ideas to suggest answers to questions. Communicate ideas in different ways. Use simple equipment to observe closely. Gather and record data to help in answering questions.

Year One Key Vocabulary:

Anchor - petal, root, bulb, seed, trunk, branches, stem, fruit, head, neck, arm, elbow, leg, knee, face, ears, eyes, hair, mouth, teeth, hard/soft, stretchy/stiff, shiny/dull, rough/smooth, bendy, brick, paper, fabrics, elastic, foil, wood, plastic, glass, metal, rock, object, fish, birds, seasons, weather, winter, spring, summer, autumn, changes

Goldilocks – stalk, mammals, carnivores, herbivores, omnivores, habitat, material, waterproof, length, vary, properties, senses, touch, taste, smell, sight, wing, claw, feathers, fur, scales

Step-on - deciduous, evergreen, amphibians, reptiles, absorbent, opaque/transparent, observe, compare, record, temperature



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	Plants	Animals Including Humans	Everyday materials	Seasonal Changes	Living things and their habitats	Working Scientifically
Year Two	<ul style="list-style-type: none"> I know how to describe the basic needs of plants (water, light and a suitable temperature) for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants. I know how to observe and describe how seeds and bulbs grow into mature plants. I know how to find out and describe how plants need to grow and stay healthy. 	<ul style="list-style-type: none"> RSHE-Describe the relationship between adult animals and their offspring. RSHE-I know how to name and locate parts of the human body, including those related to the senses and describe them. I know how to describe the basic needs of animals for survival (water, food and air) and the main changes as offspring from young animals, including humans, grow into adults. I know how to group animals according to what they eat, describe how animals get their food from other animals and/or plants, and use simple food chains to describe these relationships RSHE I know how to describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene 	<ul style="list-style-type: none"> I know how to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. I know how to describe how the shapes of solid objects made from some materials can be changed by applying forces in different directions e.g. squashing, bending, twisting and stretching 	N/A	<ul style="list-style-type: none"> I know how to 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. I know how to identify and name a variety of plants and animals in their habitats, including micro-habitats I know how to 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. I know how to explore and compare the differences between things that are living, dead, and things that have never been alive. 	Pupils can: <ul style="list-style-type: none"> Use simple equipment to observe closely including changes over time. Use observations and ideas to suggest answers to questions noticing similarities, differences and patterns. Identify, group and classify. Perform simple comparative tests. Gather and record data to help in answering questions including from secondary sources of information. Ask simple questions and recognise that they can be answered in different ways using scientific language. Communicate my ideas, what I can do and what I can find out in different ways.



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Year Two Key Vocabulary:

Anchor – seaside, woodland, ocean, rainforest, desert, polar, living, dead, alive, depend, basic needs, plants, seeds, temperature, adult, exercise, egg, chick, chicken, egg, caterpillar, butterfly, tadpole, frog, lamb, sheep, baby, toddler, child, teenager, adult, growth, object, flexible

Goldilocks – habitat, food chain, life cycle, offspring, survival, hygiene, germs, bulbs, observe, record, compare, equipment, absorbent, transparent, opaque, producer, predator

Step-on - micro-habitat, germination, reproduction, excretion, pupa, spawn, adolescent, nutrition, data, classify, identify, protein, carbohydrate