

Science Reception Long Term Plan

Characteristics of Effective Learning		
Playing and Exploring – Engagement <ul style="list-style-type: none"> • Finding out and exploring ✓ • Playing with what they know ✓ • Being willing to 'have a go' ✓ 	Active Learning – Motivation <ul style="list-style-type: none"> • Being involved and concentrating ✓ • Keeping on trying ✓ • Enjoying achieving what they set out to do ✓ 	Creating and Thinking Critically – Thinking <ul style="list-style-type: none"> • Having their own ideas (creative thinking) ✓ • Making links (building theories) ✓ • Choosing ways to do things (critical thinking) ✓

Area of Science	Knowledge and skills	Vocab
Working Scientifically Working towards meeting ELGs: Listening, Attention & Understanding: Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions; Make comments about what they have heard and ask questions to clarify their understanding; Hold conversation when engaged in back-and-forth exchanges with their teacher and peers. Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary; Speaking: Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate; Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.	Ask questions about the world around them. Observe using simple equipment with support. Make simple predictions. Begin to perform simple tests. Begin to name Begin to sort Talk to an adult about what they have found out and with support, explain why some things occur.	Why, how, when, where, observe, equipment, test, name, group, explain, same, different, patterns, compare, sorting, question, test, magnifying glass

<p>Understanding plants</p> <p>Working towards meeting ELG: The Natural World: Explore the natural world around them, making observations and drawing pictures of animals and plants</p>	<p>Begin to name plants. Begin to name trees. Draw pictures of trees and plants with some detail. Begin to name parts of a plant and tree. Begin to observe how plants and bulbs change over time. Begin to describe what a plant needs to grow and stay healthy.</p>	<p>Plants, trees, grow, lifecycle, roots, stem, leaves, flower, trunk, branches, water, light, warmth, soil, wild flowers, garden plants, blossom, petal, seed, bulb, grow, habitat.</p>
<p>Understanding animals and humans</p> <p>Working towards meeting ELG: Managing Self: Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices. The Natural World: Explore the natural world around them, making observations and drawing pictures of animals and plants</p>	<p>Name some common animals. Draw common animals. Describe what animals eat. Begin to name the body parts of familiar animals. Begin to name the off spring of animals. Begin to name what an animal needs to live. Understand the importance of healthy food choices and exercise.</p>	<p>Animals, birds, fish, amphibians, reptiles, mammals, meat, plants, grass, carnivores, herbivores, omnivores, predator, prey, body parts e.g. legs, arms, head, wings, fur, skeleton. Adult and baby animal, life cycle, egg, caterpillar, chrysalis, butterfly, water, food, air, hygiene, air, exercise. meat, potatoes, fruit, vegetables, milk, cheese, see, hear, feel, smell, taste.</p>
<p>Investigate living things</p> <p>Working towards meeting ELG: The Natural World: 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>	<p>Begin to understand what a habitat is. Know the similarities and differences between habitats. Begin to name animals and plants that live in different habitats. Begin to describe simple food chains.</p>	<p>Habitat, wild, wildlife, native, woodland, desert, ocean, seaside jungle, Arctic, Microhabitats, log, stone, tree, leaves, soil, pond, garden, river, stones, rocks, logs,</p>
<p>Investigate materials</p> <p>Working towards meeting ELG: The Natural World: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>Begin to name objects and the materials that they are made from. Name common materials. Group common everyday materials. Describe common everyday materials.</p>	<p>Wood, metal, plastic, paper, card board, float and sink, waterproof and not waterproof, strong and weak, hard, soft, recycle, not recyclable, melting, glass, water, rock, brick, fabric, materials, shiny, dull, stretch, bend, twist, squash,</p>
<p>Understand movement, forces and magnets</p>	<p>Name objects that a pushed and pulled. Begin to name objects that are magnetic.</p>	<p>Magnets, forces, pushed, pulled, force, push, pull, move, movement,</p>
<p>Understand the Earth's movements in space</p> <p>Working towards meeting ELG: The Natural World: Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</p>	<p>Begin to observe the apparent movement of the sun, Talk about the changing seasons. Talk about the weather throughout the different seasons.</p>	<p>Space, earth, moon, name of the planets, shadows, Seasons, winter, spring, summer, autumn, weather, sun, rain, snow, wind, cold, warm, hot, day length, day light</p>

Other areas of the EYFS that Science will enable the children to work towards meeting ELGs:

Listening, Attention & Understanding: Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions;

Make comments about what they have heard and ask questions to clarify their understanding;

Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.

Speaking: Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary;

Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate;

Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.

Self-Regulation: Show an understanding of their own feelings and those of others, and begin to regulate their behaviour accordingly;

Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.

Managing Self: Be confident to try new activities and show independence, resilience and perseverance in the face of challenge;

Building Relationships: Show sensitivity to their own and to others' needs.

Writing: Write recognisable letters, most of which are correctly formed;

Spell words by identifying sounds in them and representing the sounds with a letter or letters;

Write simple phrases and sentences that can be read by others.

Creating materials: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;