



# Science Progression Document



## Early Learning Goals

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.

<b>Nursery</b>	<b>Reception</b>
<p><b>Disciplinary knowledge</b></p> <ul style="list-style-type: none"> <li>• Show curiosity and ask questions</li> <li>• Make observations using senses and simple equipment</li> <li>• Make direct comparisons</li> <li>• Use equipment to measure</li> <li>• Record observations by drawing, taking photos, using sorting rings</li> <li>• Use observations to help answer questions</li> <li>• Talk about what they are doing and have found out</li> <li>• Identify, sort and group</li> </ul> <p><b>Substantive knowledge</b></p> <p>Use all senses in hands-on exploration of natural materials. Talk about what they see, using a wide vocabulary. Explore how things work. Explore collections of materials with similar and/or different properties. Talk about the differences between materials and changes they notice. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things.</p>	<p><b>Disciplinary knowledge</b></p> <p>Describe what they see, hear and feel whilst outside. Begin to expose to working scientifically skills to prepare for year 1:</p> <ul style="list-style-type: none"> <li>• Ask simple questions when prompted</li> <li>• Make simple predictions</li> <li>• Make relevant observations</li> <li>• Record observations by drawing, taking photos, using sorting rings and simple tick sheets</li> <li>• Conduct simple tests, with support</li> <li>• Use equipment to measure</li> <li>• Identify and classify with guidance</li> <li>• Gather data as a group, with support</li> <li>• Use observations to suggest answers to simple questions</li> </ul> <p>Explore the natural world around them – all child-led, based on what children notice and what they are interested in. Might include (but not limited to): ice, shadows, light, insects, animals, types of plants/trees, magnets attracting objects, objects floating.</p> <p><b>Substantive knowledge</b></p> <p>Understand the effect of changing seasons in the natural world around them. Recognise some environments that are different to the one in which they live. Know some names of plants, trees and flowers from making observations. Identify different parts of their body. Know the need for healthy food and a varied diet. Know the effects of exercise on their bodies. Know that leaves fall off trees. Know that weather changes across the seasons.</p>

## Vocabulary:

Science, experiment, investigation, observe, test, why, senses, world, plants, leaf, stem, root, flower, seeds, animals, humans, materials, natural, change, grow, decay, rot, environment

Autumn: leaf, grass, tree, weather, rain, wind, falling, snow, autumn, twigs, logs, changing, branch, trunk; nose, mouth, ears, eyes; look, touch, feel, smell, taste.

Spring: cold, snow, hard, empty, ice, dark, bird, frosty, icy, icicles, Robin, Blackbird, Pigeon, bare.

Summer: