



**Understanding the World – The natural world (Science)**

In planning and guiding what children learn, practitioners must reflect on the different rates at which children are developing and adjust their practice appropriately, referring to the Characteristics of Effective Teaching and Learning

These are: **playing and exploring** – children investigate and experience things, and ‘have a go’; **active learning** – children concentrate and keep on trying if they encounter difficulties, and enjoy their achievements for their own sake; **creating and thinking critically** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things.

In addition, the **Prime Areas of Learning (Personal, Social and Emotional Development, Communication and Language and Physical Development)** underpin and are an integral part of children’s learning in all areas.

**EYFS Understanding the World Educational Programme (Statutory)**

Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children’s personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children’s vocabulary will support later reading comprehension.

**ELG – Understanding the World –The natural world (Statutory)**

Children at the expected level will be able to:

- 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.

**Development Matters (Non-Statutory)**

Focus	Living things and their habitats	Plants	Animals, including humans
<b>Reception</b>	<ul style="list-style-type: none"> <li>• Describe what they see, hear, smell &amp; feel whilst outside – focused observation of the natural world</li> <li>• Discuss how we care for the natural world around us.</li> <li>• After close observation, draw pictures of the natural world,</li> </ul>	<ul style="list-style-type: none"> <li>• Describe what they see, hear &amp; feel whilst outside (senses)</li> <li>• Name &amp; describe some plants</li> <li>• Identify familiar plants</li> <li>• Draw pictures of plants</li> <li>• Talk about things they have seen outside including plants</li> <li>• Understand the effect of changing</li> </ul>	<ul style="list-style-type: none"> <li>• Describe what they see, hear, smell &amp; feel (senses)</li> <li>• Name and describe some animals</li> <li>• Identify familiar animals</li> <li>• Observational drawings of animals</li> <li>• Be able to show care and concern for living things</li> <li>• Talk about things they have seen outside including animals</li> <li>• Encourage children to observe how animals behave differently as the seasons change</li> </ul>

	including animals and plants	seasons on the natural world around them (weather and seasonal features)	
<b>Year 1 (NC)</b>	<ul style="list-style-type: none"> <li>• Observe changes across the 4 seasons</li> <li>• Observe and describe weather associated with the seasons and how day length varies</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees</li> <li>• Identify and describe the basic structure of a variety of common flowering plants, including trees</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</li> <li>• Identify and name a variety of common animals that are carnivores, herbivores and omnivores</li> <li>• Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</li> <li>• Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</li> </ul>

**Understanding the World – The natural world / Science overview**

**ELG -**

- 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

**Development Matters (Non-Statutory)**

<b>Focus</b>	<b>Materials</b>
<b>Reception</b>	<ul style="list-style-type: none"> <li>• Observe &amp; interact with natural processes, such as ice melting, a sound causing a vibration, light travelling through transparent material, an object casting a shadow, a magnet attracting an object &amp; a boat floating on water</li> <li>• Model the vocabulary needed to name specific features of the natural world, both natural &amp; man-made</li> </ul>
<b>Year 1 (NC)</b>	<ul style="list-style-type: none"> <li>• Distinguish between an object and the material from which it is made</li> <li>• Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</li> <li>• Describe the simple physical properties of a variety of everyday materials</li> <li>• Compare and group together a variety of everyday materials on the basis of their simple physical properties</li> </ul>

<p>Autumn 1 – Me and My Community / Exploring Autumn</p>	<p>Autumn 2 – Dangerous Dinosaurs / Sparkle and Shine</p>	<p>Spring 1 – Once upon a time / Puddles and Rainbows</p>
<ul style="list-style-type: none"> <li>• <b>Woodland walk</b> – what can you see in Autumn?</li> <li>• <b>Exploring leaves</b></li> <li>• <b>Who lives in the woods?</b></li> <li>• <b>Wild ones</b> – looking at wild animals, e.g. squirrels</li> <li>• <b>Autumnal fruits</b> - Provide a selection of autumnal fruit and vegetables for the children to explore and discuss.</li> <li>• <b>Sweep it up</b> – provide rakes and brooms for children to sweep the leaves.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Dinosaur eggs</b> – can you help the dinosaurs escape from the frozen eggs?</li> <li>• <b>Exploding volcanoes</b> – investigating and observing what happens when adding mentoes into cola (inside the mod rock volcano made for the small world area).</li> <li>• <b>Is it shiny?</b> - Explain that some objects reflect light so it makes them appear shiny, whereas non-shiny objects do not reflect light. Give the children two hoops to sort the objects into the groups: shiny or non-shiny.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Peas (The Princess and the pea)</b> – sorting materials to see which ones would make the best mattress.</li> <li>• <b>Royal baths</b> – Adding different things to water and observing the changes.</li> <li>• <b>Magic apples</b> – exploring Snow White’s apples (observations and looking at decay over time)</li> <li>• <b>Building materials</b> – sorting different materials and looking at their properties</li> <li>• <b>Go on a welly walk</b> in the local environment. Provide the children with paint colour charts and challenge them to find as many different colours in the environment as possible.</li> <li>• <b>Sunshine and showers</b> – looking at the weather in winter and spring</li> <li>• <b>It’s raining</b> – experimenting with shaving foam to create rain clouds</li> <li>• <b>Is it waterproof?</b> Exploring different materials</li> <li>• <b>Prisms</b> – can you make a rainbow with torches, cds etc</li> <li>• <b>Windy day</b> – exploring wind chimes, wind socks, windmills etc on windy days</li> <li>• <b>Torches</b> – explore torches with different coloured cellophane.</li> </ul>
<p>Spring 2 – Big Wide World / Splash</p>	<p>Summer 1 – Sunshine and Flowers / Shadows and Reflections</p>	<p>Summer 2 – Moving on</p>
<ul style="list-style-type: none"> <li>• <b>Animals around the world</b></li> <li>• <b>World Climate</b></li> <li>• <b>Looking after our world</b></li> <li>• <b>Recycling</b></li> <li>• <b>Hydration</b> – investigating and observing what happens when plants aren’t given water</li> <li>• <b>Water building</b> – investigating materials to see which ones are best for building a floating</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Outside explorers</b> - Explore the environment and talk about the plants, trees and wildlife that live there. Talk about how the plants are cared for and what they need to grow and survive.</li> <li>• <b>Changes</b> - Display photographs of the local environment throughout the year. Invite the children to talk about changes during each season, including the weather, plants and animals.</li> <li>• <b>Magnify</b> - offer a range of wild or garden flowers and various magnifiers for close observation.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Growing up!</b> How we have changed during our time in Reception.</li> </ul>

<p>structure and an underwater structure.</p> <ul style="list-style-type: none"> <li>• <b>Is it waterproof?</b> Investigating materials</li> </ul>	<p>Provide paper and colouring pencils for the children to draw one of the flowers and label the different parts.</p> <ul style="list-style-type: none"> <li>• <b>Raising butterflies</b></li> <li>• <b>Our garden</b> - Set up a gardening area and ask the children what they would like to plant in their garden. Provide pots, compost, watering cans, trowels, strawberry and tomato plants, and packets of seeds, including sunflower seeds and quick-growing vegetable seeds, such as salad leaves and radishes. Invite the children to plant the seeds and plants, and water. Talk about how to look after the garden and plants so that they will grow.</li> <li>• <b>Growing Sunflowers</b></li> <li>• <b>Garden scavenger hunt</b></li> <li>• <b>Who's in the garden?</b> Creating butterfly /insect feeders – which fruits did the mini beasts like the best?</li> <li>• <b>Eco gardeners</b> – creating our own compost</li> <li>• <b>Bug hotels</b></li> <li>• <b>Pressing flowers</b></li> </ul> <ul style="list-style-type: none"> <li>• <b>What is a shadow?</b></li> <li>• <b>Let's investigate</b> - Exploring objects to see which are opaque and see through in the sun.</li> <li>• <b>Shadow patterns</b></li> </ul>	
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