

## Nursery - UTW- The Natural World

### Science progression through EYFS

Playing & Exploring - Engagement	Active Learning - Motivation	Creating & Thinking Critically - Thinking
<ul style="list-style-type: none"> <li>Finding out &amp; exploring</li> <li>Playing with what they know</li> <li>Being willing to 'have a go'</li> </ul>	<ul style="list-style-type: none"> <li>Being involved &amp; concentrating</li> <li>Keep on trying</li> <li>Enjoying achieving what they set out to do</li> </ul>	<ul style="list-style-type: none"> <li>Having their own ideas (creative thinking)</li> <li>Making links (building theories)</li> <li>Working with ideas (critical thinking)</li> </ul>

Understanding the World- The Natural World 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

Focus	Seasonal changes	Everyday materials	Plants	Animals including Humans	Vocabulary- To be used daily.
Nursery Skills	<ul style="list-style-type: none"> <li>Explore different habitats outdoors, e.g., scent, colour &amp; shape of flowers attracting bees</li> <li>Observe growth &amp; decay over time</li> <li>Begin to understand the need to respect &amp; care for the natural environment &amp; all living things</li> <li>Talk about the weather and the animals they see or hear, using a wide vocabulary</li> <li>Recognise the change through seasons of our outdoor environment</li> </ul>	<ul style="list-style-type: none"> <li>Explore materials with different properties</li> <li>Explore natural materials, indoors and outdoors.</li> <li>Explore collections of materials with similar and/ or different properties.</li> <li>Talk about the differences between materials and changes that they notice.</li> </ul>	<ul style="list-style-type: none"> <li>Observe plants closely through a variety of means e.g., magnifiers &amp; photographs</li> <li>Begin to understand the need to respect &amp; care for the natural environment &amp; all living things</li> <li>Extend vocabulary: leaves, petals, roots, bulb, trunk, branches, stem, garden plants, wild plants, seeds</li> <li>Use touch, sight and hearing in hands-on exploration of plants</li> <li>Understand the key features of the life cycle of a plant</li> </ul>	<ul style="list-style-type: none"> <li>Observe animals closely through a variety of means e.g., magnifiers &amp; photographs</li> <li>Look at key stages of development from birth to adult</li> <li>Observe &amp; describe in words or actions the effects of physical activity on body</li> <li>Observe the key features of the life cycle of a butterfly</li> <li>know some animals have offspring horse – foal, cow - calf</li> </ul>	Senses, experiment, plants – leaf, stem, root, flower, animals, humans, materials, change, growth, environment, heavy, light, float, sink, baby, toddler, child, egg, caterpillar, seasons, melt, freeze, hard, soft, kitten, puppy, foal, calf etc
Nursery Knowledge	<b>Autumn</b> <b>All about me/ Celebrations</b>	<b>Spring</b> Traditional Tales/ Growth and Change	<b>Summer</b> People Who Help Us/ Chester Zoo/Knowsley Safari		
	<ul style="list-style-type: none"> <li>Name &amp; identify body parts- facials features, arms, legs, fingers, and toes</li> <li>Know the names of different body parts &amp; what they do</li> <li>Know about the different seasons &amp; the effect they have on plants, trees &amp; creatures</li> <li>Using images can sequence the change from baby to child</li> <li>Use all their senses in hands-on exploration of natural materials</li> </ul>	<ul style="list-style-type: none"> <li>Know the names of animal babies</li> <li>Observe that most plants start growing from a seed or bulb</li> <li>Observe all plants need water &amp; light to grow &amp; survive</li> <li>Know the correct terms to describe the life cycle of a butterfly</li> <li>Know how to care for plants</li> <li>Know &amp; talk about the life cycle of a plant</li> <li>Know the names of the basic parts of a plant &amp; tree</li> </ul>	<ul style="list-style-type: none"> <li>Know some different properties of material e.g. hard/soft and rough/smooth</li> <li>Know some objects float &amp; sink</li> </ul>		

- Can use a magnifying glass

Children to be exposed to key vocabulary daily in provision. High quality text to be chosen for story times that allow for questioning opportunities relating to key events. The outdoor classroom will be used as a key feature in our science learning through the natural world. Trips to the farm and the zoo will be used to enhance children experiences of animals and class experiences of chickens and egg laying and caring for our own caterpillars/butterflies. Experience of Forest School.

## Reception - UTW- The Natural World

### Science progression through EYFS

**Educational Programme:** 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

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Focus	Seasonal changes		Everyday materials	Plants	Animals including Humans	Vocabulary- To be used daily.
Reception Skills, Knowledge & Understanding	<ul style="list-style-type: none"> <li>Describe what they see, hear &amp; feel whilst outside</li> <li>Observational drawings of the natural world</li> <li>Discuss how to care for the living things &amp; their habitats</li> <li>Examine change over time</li> <li>Express opinions on natural &amp; built environments &amp; opportunities to hear different points of view on the quality of the environment. Use words such as busy, quiet, pollution</li> <li>Understand the effect of changing seasons on the natural world around them</li> </ul>		<ul style="list-style-type: none"> <li>Explore collections of materials with similar and/ or different properties.</li> <li>Talk about the differences between materials and changes that they notice</li> <li>Characteristics of liquids &amp; solids e.g., cooking eggs, melting chocolate</li> <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> </ul>	<ul style="list-style-type: none"> <li>Extend vocabulary: blossom, buds, bulb, evergreen, deciduous</li> <li>Describe what they see, hear &amp; feel whilst outside</li> <li>Name &amp; describe some plants</li> <li>Draw pictures of plants</li> </ul>	<ul style="list-style-type: none"> <li>Shows some understanding of that good practices with regard to exercise, eating, drinking water, sleeping &amp; hygiene can contribute to good health</li> <li>Describe what they see, hear &amp; feel</li> <li>Identify different parts of their body &amp; animals Be able to show care and concern for living things</li> <li>Know the effects exercise has on their bodies</li> <li>Have some understanding of growth and change</li> <li>Talk about things they have observed including animals</li> <li>Observational drawings of animals</li> </ul>	<ul style="list-style-type: none"> <li>Test, fair, why, senses, world, plants, leaf, stem, root, flower, animals, humans, materials, water, waterproof, natural, change, growth, hot, cold, environment, heavy, light, float, sink, stretch, snap, magnetic, life cycle, baby, toddler, child, teenager, adult, egg, chick, embryo, hatchling, caterpillar, chrysalis, bark, stick, branch, seasons, melt, liquid, solid, hard, soft, kitten, puppy, foal, calf, rough, smooth, shiny, dull, deciduous, oaks, maples, beeches, seasonal, changes, similarities, difference,</li> </ul>
	Learning Outcomes	Autumn 1 My Environment & Me	Autumn 2 Special Times & Special Places	Spring 1 Same and Different	Spring 2 Lifecycles	Summer 1 In My Garden

	<p>Explore the changes to animals and plants in Autumn – leaves, trees, insects, animals, nocturnal animals. Talk about weather changes in the seasons. Talk about hedgehogs, birds, tortoise, fish and frogs and their habitats in Autumn and Winter – hibernation. (Hedgehogs, tortoise) fish and frogs move down to the bottom of lakes and ponds and some even burrow into the mud. Name the properties of some materials such as – hard and soft, rough and smooth and shiny and dull. Describe the most suitable materials for building and give explanations as to why. Manipulate some materials such as Play-Dough and describe how they change – squash, stretch, bend, twist. Look at a range of materials in the environment and describe how they feel. Understand how to reduce the spread of germs – hand washing, cleaning. Understand how to look after ourselves – tooth brushing healthy eating such as fruit and vegetables. Name some of a human's body parts – legs, arms, head, knees, elbow. Identify some parts of the body and locate them on a map of themselves. Talk about some animal's habitats in our immediate environment – where do the insects, chickens, foxes and hedgehogs live? Understand that familiar places can be habitats - Sankey Brook, the outdoor area, bug hotels. Explore our forest school and understand that it is a habitat for living things e.g. bats and badgers</p>	<p>Explore the effects weather has on living things in Winter and Spring – leaves, trees, plants, insects, animals. Compare some similarities and differences between the seasons. Compare the effects heating and cooling has on ingredients such as melting and freezing. Talk about animals in their habitats in Spring - comparing this to Autumn and Winter. Understand that plants need space, water, light and air to grow. Use correct terms when observing the life cycle of butterflies and ladybirds Observe and talk about the life cycle of a chicken using the correct terminology Use language related to the life cycle of a chicken to explain the process – brooding, incubation, clutch of eggs. Explore the life cycle of humans and begin to compare this with the life cycle of a chicken. Talk about routines in the morning and the evening and use language related to day and night. Begin to talk about an animal's offspring – hen and chick, sealion and a pup, whale and a calf. Use language relating to planting and plant sunflowers and bulbs in the outdoor area – seeds, plants, bulbs.'</p>	<p>Explore the effects weather has on living things in Summer – leaves, trees, grass, plants, insects, animals. Talk about similarities and differences between each season. Classify a set of objects by their materials - wood, plastic, fabric, sand and glass – Recycling. Know the foods different animals might eat and how they find their food – whales hunt for krill. Compare similarities and differences between animals' habitats – insects. Talk about and compare how habitats change for animals during the Summer. Understand and explain the life cycle of a plant. Talk about some trees that are deciduous – oaks, maples, and beeches. Observe and talk about the life cycle of butterflies and compare this with the life cycle of chicken's and humans.</p>
<b>Seasonal Changes</b>	<b>Everyday Materials</b>	<b>Plants &amp; Animals Including Humans</b>	
<p>□ Children to be exposed to key vocabulary daily in provision. □ High quality text to be chosen for story times that allow for questioning opportunities relating to key events. □ The outdoor classroom will be used as a key feature in our science learning through the natural world. Forest School sessions will further enhance this experience □ Visits from the farm will be used to enhance children experiences of animals and first hand experiences of watching our own caterpillars/butterflies life cycles (net).</p>			