

## EYFS Overview - UTW - 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

## UTW 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.

Birth to three	Development Matters	Opportunities from Long Term Plan
	<ul style="list-style-type: none"> <li>• Explore materials with different properties</li> <li>• Explore natural materials with different properties</li> <li>• Explore and respond to different natural phenomena in their setting and on trips.</li> </ul>	<ul style="list-style-type: none"> <li>• Talking to the children when outdoors, pointing out the sky, trees, clouds, etc.</li> <li>• Walk in the woods</li> <li>• Walk to the community garden at the different seasons</li> <li>• Planting bulbs and seeds and beans</li> <li>• Observing animals in outdoor area- feed birds, observe worms and other mini-beasts.</li> <li>• Have caterpillars and hatch them into butterflies.</li> <li>• Baking and the changes in materials</li> <li>• Explore materials such as ice, sand, mud, straw,</li> <li>• Splashing in puddles</li> <li>• Explore and introduce different animals from texts</li> </ul>
<b>Three-Four year olds</b>	<ul style="list-style-type: none"> <li>• Understand 'why' questions, like:</li> <li>• Make healthy choices about food, drink, activity and tooth brushing.</li> <li>• Use all their senses in hands-on exploration of natural materials. Explore collections of materials with similar and/or different properties.</li> <li>• Talk about what they see, using a wide vocabulary.</li> <li>• Explore how things work.</li> <li>• Plant seeds and care for growing plants.</li> </ul>	<ul style="list-style-type: none"> <li>• Autumn - change in weather changes in nature, walk in the woods, use senses. Draw what they see.</li> <li>• 3 little pigs - materials, look at properties of different materials and which would be most suitable for a house and why.</li> <li>• Gingerbread man - floating and sinking. Make boats with different materials find out which floats.</li> <li>• Baking - Gingerbread men, Birthday cake, porridge</li> <li>• Use torches and make shadows in dark dens.</li> </ul>

	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Explore and talk about different forces they can feel.</li> <li>• Talk about the differences between materials and changes they notice.</li> </ul>	<ul style="list-style-type: none"> <li>• Magnetism - materials - think about hand cuffs - what are they made from? Why? Properties use magnets see what is magnetic.</li> <li>• Toys - explore wind up toys and mechanical toys.</li> <li>• Planting - Plant beans, seeds, visit the community garden</li> <li>• Animals - farm - Visit the farm draw and name the animals</li> <li>• Melting ice - investigate what makes ice melt.</li> <li>• Life cycle of chicken/egg - have eggs and hatch into chicks.</li> <li>• Daily tooth brushing and discussion about why. Daily talk about healthy eating in snack time and exercise and keeping our minds and body healthy.</li> </ul>
<b>Reception</b>	<ul style="list-style-type: none"> <li>• Learn new vocabulary.</li> <li>• Ask questions to find out more and to check what has been said to them.</li> <li>• Articulate their ideas and thoughts in well-formed sentences.</li> <li>• Describe events in some detail.</li> <li>• Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.</li> <li>• Use new vocabulary in different contexts.</li> <li>• Know and talk about the different factors that support their overall health and wellbeing: - regular physical activity - healthy eating - tooth brushing - sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian</li> <li>• Explore the natural world around them.</li> <li>• Describe what they see, hear and feel while they are outside.</li> <li>• Recognise some environments that are different to the one in which they live.</li> <li>• Understand the effect of changing seasons on the natural world around them.</li> </ul>	<ul style="list-style-type: none"> <li>• Seasonal walks - Changes between Autumn, Spring, Summer, Winter look at the woods, community garden and other local places that can walk to.</li> <li>• Baking/cooking - soup - changing materials.</li> <li>• Habitats of different animals - research them</li> <li>• Different environments - how are they different? Talk about them.</li> <li>• Plant beans, seeds</li> <li>• Drawing of plants/flowers - label them</li> <li>• Minibeast hunt - look at habitats for minibeasts.</li> <li>• Draw minibeasts</li> <li>• Zoo animals - trip to Blackpool Zoo - name and describe the animals, talk about their habitats, draw the animals, make 3D sculptures of them. Draw out life sized animals in chalk.</li> <li>• Talk about the weather in different countries.</li> <li>• When creating music for the Minibeast bop investigate sounds and vibrations.</li> <li>• Investigate different materials for superhero's and which material will allow/not allow a laser beam to shine through.</li> </ul>

**ELG's (Statutory)**

**CAL - Listening, Attention and Understanding**

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

**PSE - Managing-Self**

- Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices

**UTW - 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.
- Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.