

## Science overview 2023 - 2024

### EYFS - All year round through UTW & EAD areas

Nursery	Reception
<p>Topics covered: plants, animals and humans (themselves &amp; family)- through observation, stories and discussion</p> <p><b>EYFS Coherence: Life; Material &amp; Forces</b></p> <p>Age 3-4:</p> <ul style="list-style-type: none"> <li>Explore collections of materials with similar and/or different properties. 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> <li>Understand the key features of the life cycle of a plant and an animal.</li> <li>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>	<p>Topics covered: plants, animals and humans (themselves &amp; family)</p> <p><b>EYFS Coherence: Life &amp; Material</b></p> <ul style="list-style-type: none"> <li>Explore the natural world around them</li> <li>Recognise some environments that are different from the one in which they live.</li> <li>Describe what they see, hear and feel whilst outside.</li> <li>Understand the effect of changing seasons on the natural world around them.</li> </ul> <p><b>ELG: The Natural World</b></p> <p>Children at the expected level of development will:</p> <ul style="list-style-type: none"> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants;</li> <li>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;</li> <li>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.</li> </ul>

	Autumn					Spring					Summer				
Year 1	<b>Everyday materials</b> Writing to inform: What are objects made from & why?					<b>Plants</b> Fact file of plants and trees in the school grounds					<b>Animals including humans</b> Fact file of common animals including what they eat				
Scientific Rigour	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation
	<b>Seasonal Changes</b> Non-fiction report to Reception: what happens in the world as the seasons change?														
Scientific Rigour	Observation			Identifying & classifying			Fair Test			Pattern Seeking			Research and Explanation		

<b>Year 2</b>	<b>Everyday materials</b> Writing to inform: what are different materials used for and why?					<b>Plants and animals including humans</b> Annotated diagram of how a young animal grows into a mature animal including what they need to grow. Annotated diagram of how seeds grow into mature plants including what they need to grow.					<b>Living things and their habitats</b> Fact file of an animal and its habitat				
<b>Rigour</b>	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation

<b>Year 3</b>	<b>Forces &amp; magnets</b> Comparative test: are all magnets the same strength? (Including explanation of results)					<b>Plants and animals including humans</b> Writing to inform: which animals have skeletons and what are they for?					<b>Rocks &amp; light</b> Comparative test: what happens to shadows when distance between the light source and the object change? Writing to inform: different types of rocks				
<b>Rigour</b>	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation

<b>Year 4</b>	<b>Sound &amp; electricity</b> Comparative test: Which materials are the best sound insulators? (Including explanation of results) Writing to explain: how do switches work and what materials should they be made of?					<b>Animals including humans &amp; their habitats</b> Make a simple key to identify local plants and animals Writing to explain: how does the digestive system work?					<b>States of matter</b> Comparative test: how long does it take for different solids to melt?				
<b>Rigour</b>	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation

<b>Year 5</b>	<b>Earth, space &amp; forces</b> Non-fiction report to year 4 (Moon/planet/air resistance)					<b>Animals including humans &amp; their habitats</b> Writing to inform: what happens as we age?					<b>Properties &amp; changes of materials</b> Fair test: What happens to the amount of evaporation if we change a variable?				
<b>Rigour</b>	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation

<b>Year 6</b>	<b>Light &amp; electricity</b> Writing to explain: How does a periscope work? Fair test: What will happen to the brightness of the bulb if we change the length of the wires?					<b>Animals including humans &amp; their habitats</b> Research unfamiliar animals and plants from a broad range of other habitats and create a key showing where they belong in the classification system Writing to explain: how does the heart work?					<b>Evolution &amp; Inheritance</b> Writing to explain: how has [insert animal] adapted to its environment?				
<b>Rigour</b>	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation	Observation	Identifying & classifying	Fair Test	Pattern Seeking	Research & Explanation

