

## Curriculum Overview

### Autumn 1

#### HOW CAN DATA HELP US UNDERSTAND THE WORLD AROUND US?

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Focus:</b>	Maths							
<b>Drivers</b>	Maths: Number UTW: The World UTW: People & communities	Maths: Number UTW: The World UTW: People & communities	Science	Science DT	Science	Science	Science Geography	Science DT
<b>Enhancers</b>	EAD: Exploring Media & Materials PD: Health & Self Care	EAD: Exploring Media & Materials PD: Health & Self Care PD: Moving & Handling	Art	Geography	DT Art	Art Geography	Art	Art
<b>Project</b>	<p>What are our favourite fruits &amp; vegetables?</p> <p><i>Children will explore a range of fruits and vegetables and make preferences on which they like. They will learn how these foods are grown by farmers. They will express their likes and dislikes and use this data to produce a class chart to represent the data.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Showcasing our favourite vegetables using block charts and pictograms.</li> <li>Printing with fruit and veg.</li> <li>Perform a harvest song</li> </ul>	<p>Which bread from around the world do we like the most?</p> <p><i>Children will explore a range of breads and make preferences on which they like. They will learn that food can be made up of different parts. They will express their likes and dislikes and represent this data and interpret this. Using this information, the children will make sandwiches based on their preferences.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Bread tasting from around the world and displaying our favourites mathematically</li> <li>Making bread/sandwiches, spreading and creating halves and quarters.</li> </ul>	<p>What makes the best curtain?</p> <p><i>Children will look at common materials and the everyday items they can be made into. They will describe the properties of these materials and use their knowledge from investigations to make design choices for a curtain/blind. The children will develop a range of skills to embellish their curtain which includes printing and tie-dying. From evaluations of their prototyping the children will design and make a panel for the curtain/blind.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Make a class curtain/blind which keeps out the light</li> </ul>	<p>What makes the best coat?</p> <p><i>Children will design and make a coat for a travelling teddy bear who will be visiting an area of the world. The children will learn about the continents and oceans of the world and will explore which of these areas have hot or cold climates. Children investigate the properties of materials and use these findings to inform their design choices for a coat based on the climate the bear is going to. Children will develop their templating and sewing skills to enable them to make a functional product.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Make a coat for a travelling bear</li> </ul>	<p>Push or Pull? What's the greatest force?</p> <p><i>Children will design and make a magnet powered vehicle. Through investigations of the forces of push and pull they will make design choices about how the car will be powered. Children will investigate the properties of materials and use this to inform their design.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Design and make a magnet-powered vehicle</li> <li>Present investigations showing:</li> <li>Distance travelled on different surfaces</li> <li>Strengths of magnets</li> </ul>	<p>How can we reduce evaporation?</p> <p><i>Children will explore the different states of matter and use this knowledge to gain an understanding of evaporation and its place in the water cycle. Through investigations, children will design and make an effective clay bird bath which will reduce the rate of evaporation.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Design &amp; make a bird bath designed to reduce evaporation</li> <li>Present investigations showing:</li> <li>How surface area affects the rate of evaporative</li> <li>How temperature affects the rate of evaporation</li> </ul>	<p>All volcanic eruptions are equal: Support or Challenge?</p> <p><i>Children will gain knowledge and understanding of the features of a volcano and how they are formed. The children will research a volcano within the world and create a model using an armature. Children will observe different reversible and irreversible reactions and use this knowledge to simulate an eruption for their model volcano.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Design &amp; make a working model of a volcano</li> <li>Present investigations showing:</li> </ul>	<p>There is only one way to design an effective product. Support or Challenge?</p> <p><i>The children will design and make a functional product which cleans up litter. Using their knowledge of circuits, they will design an electrical component that will power this machine. The children will investigate how to make the elements of their product more effective and think carefully of the aesthetics of it.</i></p> <p>Project outcomes:</p> <ul style="list-style-type: none"> <li>Designing a machine to clean up litter</li> <li>Children to present the data to showcase how effective their machine is.</li> </ul>