



# Design and Technology Curriculum Overview

2020-21	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Autumn</b>	Understanding of the World	Expressive Arts & Design and Understanding of the World	Moving pictures	Sandwiches	Aeroplanes	Rubber band boats	Musical instruments	Food from around the world
<b>Concepts and skills taught:</b>	<ul style="list-style-type: none"> <li>Children to be given chances to observe and begin to explore technology within their environment. This could be using scissors and glue to create an animal mask, or characters linked to book of week.</li> </ul>	<ul style="list-style-type: none"> <li>Children to explore and play with different materials and observe the world around them.</li> <li>To bring these together, the children could create a 3D model of a house, <i>recycling materials</i></li> </ul>	<ul style="list-style-type: none"> <li>Pop-up books and mechanisms to make pictures move– sliders, levers, pop-ups, spinners, flaps</li> </ul>	<ul style="list-style-type: none"> <li>Healthy eating</li> <li>Balanced diet</li> <li>Dietary requirements</li> </ul>	<ul style="list-style-type: none"> <li>Measure, cut and shape materials</li> <li>Functionality – can it fly?</li> <li>Origami</li> </ul>	<ul style="list-style-type: none"> <li>Properties of materials – floating</li> <li>Consider the forces – how can we make the boat move?</li> <li>Mechanisms – making a propeller</li> </ul>	<ul style="list-style-type: none"> <li>Investigating different materials</li> <li>Consider how the instrument works and will make sounds</li> </ul>	<ul style="list-style-type: none"> <li>Food groups</li> <li>Celebrating cultures</li> <li>Understanding seasonality</li> <li>Understanding where and how a variety of key ingredients are grown, reared, caught and processed</li> </ul>
<b>Spring</b>	Expressive Arts & Design	Expressive Arts & Design and Understanding of the World	Wind chimes	Cereal packets	Money Containers	Bridges	Fairground rides	Building a shelter
<b>Concepts and skills taught:</b>	<ul style="list-style-type: none"> <li>Children to explore and play with different materials. This could be for example, creating a rice shaker instrument or rubbing materials together to make a sound.</li> </ul>	<ul style="list-style-type: none"> <li>Children to explore and play with different materials. Children could create water bottle bird feeders. <i>Recycled materials Create/discuss</i></li> </ul>	<ul style="list-style-type: none"> <li>Investigating materials – consider their properties</li> <li>Recycled materials</li> </ul>	<ul style="list-style-type: none"> <li>Investigating packaging</li> <li>3D shape nets</li> </ul>	<ul style="list-style-type: none"> <li>Suitability of materials</li> <li>Joining techniques – sewing (look at different types of stitches)</li> <li>Fastenings – buttons etc.</li> <li>Consider functionality</li> </ul>	<ul style="list-style-type: none"> <li>Bridge types</li> <li>Structure tests</li> <li>Consider how to make structures stronger/sturdier</li> </ul>	<ul style="list-style-type: none"> <li>Mechanisms – gears, pulleys, cams, levers and linkages</li> </ul>	<ul style="list-style-type: none"> <li>Investigating different types of shelter</li> <li>Advantages/disadvantages of using different materials</li> <li>Consider how structures can fail</li> <li>Consider requirements for making a good shelter</li> <li>Consider how to strengthen structures</li> </ul>
<b>Summer</b>	Expressive Arts & Design and	Expressive Arts & Design and	Fruit salad	Puppets	Smoothies	Pizzas	Bread	Moving vehicles



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	Understanding of the World	Understanding of the World						
<b>Concepts and Skills taught:</b>	<ul style="list-style-type: none"> <li>Children to explore and play with different materials and observe the world around them. To bring these together, the children could create a collage of a house.</li> </ul>	<ul style="list-style-type: none"> <li>Looking at roof garden or plants growing around playgrounds.</li> <li>Children can design a miniature class garden.</li> <li>Each child can grow cress or seed that grows similarly quickly.</li> <li>Activity could be extended by placing mini gardens outside for creepy crawly wildlife.</li> </ul>	<ul style="list-style-type: none"> <li>Healthy eating</li> <li>Preparing fruit – peeling, chopping, grating, juicing</li> <li>Health and safety – using equipment safely</li> </ul>	<ul style="list-style-type: none"> <li>Investigating different types of puppets</li> <li>Using templates</li> <li>Joining techniques - sewing</li> </ul>	<ul style="list-style-type: none"> <li>Healthy eating/living</li> <li>Flavours</li> </ul>	<ul style="list-style-type: none"> <li>Balanced diet</li> <li>Where food comes from</li> <li>Food preparation</li> <li>Dietary requirements</li> </ul>	<ul style="list-style-type: none"> <li>Comparing different types of bread</li> <li>Investigate and evaluate bread according to its characteristics</li> <li>Processes involved with making bread</li> </ul>	<ul style="list-style-type: none"> <li>Mechanisms – wheels and axels</li> <li>Creating moving models - use of circuits and motors</li> </ul>