

## Curriculum Overview Document DT

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>EYFS</b>	<p><b>Projects linked to early Design and Technology. Food and Hygiene:</b> Baking biscuits <b>Structure:</b> Exploring different materials linked the 3 little pigs. <b>Textiles:</b> Exploring textiles and materials to make dolly peg characters.</p> <p><b>Continuous Provision</b> Teach children different techniques for joining materials, such as how to use adhesive tape and different sorts of glue. Join different materials and explore different textures Provide children with a range of materials to construct with. Develop cutting techniques and scissor skills (cutting along given lines). Develop precision when sticking a variety of materials (e.g. chick, given outline, glue and feathers) Use a range of objects to build with – bricks, stickle bricks, Lego, wooden blocks etc.</p>					
<b>Year 1</b>	<p style="text-align: center;"><b>Food &amp; Hygiene - Fruit Salads.</b></p> <p>Introduction to chopping ingredients and considering how they work together.</p>		<p style="text-align: center;"><b>Mechanisms – Pulleys &amp; Levers</b></p> <p>Using sliders to create a moving picture (simple lever mechanism).</p>		<p style="text-align: center;"><b>Structure – Rolling Toy</b></p> <p>Exploring joining techniques (tabs &amp; brackets) to create a strong standing or rolling toy.</p>	
<b>Year 2</b>	<p style="text-align: center;"><b>Structure - Towers</b></p> <p>Creating spaghetti and marshmallow towers, exploring how to use shape &amp; positioning to strengthen and make them free standing. <b>Key Skills:</b> <i>Using card strips/levers to create a pop-up mechanism (e.g. Valentine cards, Christmas cards).</i></p>		<p style="text-align: center;"><b>Mechanisms – Axel to create movement</b></p> <p>Creating a wheeled vehicle using a working axel that can be pulled (considering the positioning &amp; size of materials).</p>		<p style="text-align: center;"><b>Textiles – Running Stitch</b></p> <p>Using a running stitch to create a 2D bookmark.</p>	
<b>Year 3</b>	<p style="text-align: center;"><b>Structure – Nets &amp; Templates</b></p> <p>Using nets &amp; templates to create a prototype (e.g. Elf house, picture frame, lunch box). Strengthening using cladding (&amp; introducing rendering) building on the use of tabs &amp; brackets. <b>Key Skills:</b> <i>Mexican Salsa &amp; Guacamole. Blending and pureeing ingredients.</i></p>		<p style="text-align: center;"><b>Textiles - Weaving</b></p> <p>Using weaving to create a strong material that follows a pattern/design <b>Key Skills:</b> <i>CAD – Creating simple 3D models of forest school vehicles, following a plan.</i></p>		<p style="text-align: center;"><b>Mechanism - Pulleys</b></p> <p>Creating a crane using a pulley (building on lifting by combining materials to share weight).</p>	
<b>Year 4</b>	<p style="text-align: center;"><b>Food &amp; Hygiene - Fake Away Pizza</b></p> <p>Building on chopping ingredients to shape using the bridge &amp; claw technique. Combining ingredients considering layout. <b>Key Skills:</b> <i>CAD – Creating virtual mosaics. Comparing designing by hand with designing using ICT.</i></p>		<p style="text-align: center;"><b>Mechanisms – Wind-Up Movement</b></p> <p>Shaping plastic to create a self-propelled paddle boat with a wind-up mechanism, comparing the use of push/pull with self-propelled mechanisms (e.g. wind up, balloon). <b>Key Skills:</b> <i>Electronics – Creating a basic circuit with Raspberry Pi devices to light up LEDs within a character cut-out.</i></p>		<p style="text-align: center;"><b>Structure - Kites</b></p> <p>Combining materials to create a kite that is fit for purpose (including the application of appropriate strengthening techniques – e.g. rendering).</p>	
<b>Year 5</b>	<p style="text-align: center;"><b>Textiles – Blanket Stitch &amp; Applique</b></p> <p>Using a blanket stitch &amp; appliqué to create a 3D Christmas decoration.</p>		<p style="text-align: center;"><b>Mechanisms – Pulleys &amp; Levers – CAM toy</b></p> <p>Creating a basic cam toy (building of shaping and joining card to create movement – lift rather than slide).</p>		<p style="text-align: center;"><b>Structure &amp; Electronics – Buzz Wire Game</b></p> <p>Measuring &amp; shaping wire to create a buzz wire game. Insert an electrical circuit with a switch. Insert a buzzer (swap with LED from last year). Compare strengthening flat &amp; free-standing objects. <b>Key Skills:</b> <i>Using market research to create toothbrush prototypes to appeal to KS1 children (moulding &amp; shaping plasticine).</i></p>	
<b>Year 6</b>	<p style="text-align: center;"><b>Food &amp; Hygiene - Soup</b></p> <p>Consolidating chopping ingredients to facilitate blending &amp; cooking pumpkin soup. <b>Key Skills:</b> <i>CAD – Creating a simple 3D computer generated model of a Viking longboat with key features (shield, mast, sail, oars, dragon head).</i></p>		<p style="text-align: center;"><b>Mechanisms – Wind-Up Movement using Wire</b></p> <p>Revisit wind-up mechanisms and reapply to create a “flying” butterfly using wire. Compare the similarities &amp; differences between the two mechanisms (plastic vs. wire). <b>Key Skills:</b> <i>CAD – Creating a 3D interactive model of a Ziggurat that can be explored using Minecraft Pi.</i></p>		<p style="text-align: center;"><b>Structure – Wooden Structure</b></p> <p>Cutting, joining &amp; strengthening to create a wooden bug hotel. Selecting materials that are fit for purpose &amp; considering sustainability. <b>Key Skills:</b> <i>Electronics – Use Raspberry Pi devices to program LEDs to send simple messages using Morse Code.</i></p>	