

# DT Curriculum Progression

	Food	Structures	Mechanisms	Textiles	Computing/ Electronics
Year 1	<p><b><u>Sandwiches/ Wraps</u></b></p> <ul style="list-style-type: none"> <li>• Cut, peel or grate and assemble ingredients hygienically.</li> <li>• Begin to understand that all food comes from plants or animals.</li> <li>• Begin to understand that everyone should eat at least five portions of fruit and vegetables every day.</li> </ul>	<p><b><u>Birds and Fish</u></b></p> <ul style="list-style-type: none"> <li>• Cut and shape materials (tear, fold, and curl) using tools provided</li> <li>• Build structures, exploring how they can be made stronger, stiffer, and more stable.</li> <li>• Glue and join products with a range of materials.</li> <li>• Join materials using glue.</li> </ul>	<p><b><u>Moving story books</u></b></p> <ul style="list-style-type: none"> <li>• Create products using levers and slides.</li> </ul>		<p><b><u>Designing</u></b></p> <ul style="list-style-type: none"> <li>• Model a design using software.</li> <li>• Begin to design using software.</li> </ul>

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Year 2	<p><b><u>Smoothies</u></b></p> <ul style="list-style-type: none"> <li>• Measure or weigh and assemble ingredients.</li> <li>• Understand where food comes from.</li> <li>• Understand the importance of healthy eating and a balanced diet.</li> <li>• Start to understand how to name and sort foods into the five groups.</li> </ul>	<p><b><u>Monuments</u></b></p> <ul style="list-style-type: none"> <li>• Cut materials accurately and safely. Use a range of joining techniques.</li> <li>• Build structures and explore how to make stronger, stiffer, and more stable</li> </ul>	<p><b><u>Tanks (WW2)</u></b></p> <ul style="list-style-type: none"> <li>• Create products using wheels and axles.</li> </ul>	<p><b><u>Tie Die Pencil Case with Decoration</u></b></p> <ul style="list-style-type: none"> <li>• Colour and decorate textiles using a range of techniques such as printing and adding sequins.</li> <li>• Use dip dye techniques.</li> <li>• Shape textiles using templates.</li> <li>• Join materials using a simple running stitch</li> </ul>	
Year 3	<p><b><u>Healthy Pizza in a box</u></b></p> <ul style="list-style-type: none"> <li>• Measure and cook a variety of ingredients.</li> <li>• Use a range of equipment (scales, jugs, spoons etc)</li> <li>• Begin to understand how to use a range of techniques such as chopping, slicing, kneading, and baking.</li> <li>• Start to understand that a healthy diet is made up from a variety and balance of different food and drink.</li> </ul>	<p><b><u>Roman Fort</u></b></p> <ul style="list-style-type: none"> <li>• Measure and mark out to the nearest centimetre.</li> <li>• Demonstrate a range of joining techniques.</li> <li>• Use hinges and combine materials to strengthen.</li> <li>• Make a range of cuts and holes. Measure, mark out, cut, score and assemble components with more accuracy. Start to work safely and accurately with a range of simple tools.</li> <li>• Choose a range of techniques to construct or repair products.</li> </ul>	<p><b><u>Winding Mechanisms- Knex</u></b></p> <ul style="list-style-type: none"> <li>• Create a product using winding mechanisms.</li> <li>• Start to understand that mechanical systems create movement.</li> </ul>		<p><b><u>Tinker Cad Design</u></b></p> <ul style="list-style-type: none"> <li>• Control and monitor models using software designed for this purpose.</li> </ul>

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		<ul style="list-style-type: none"> <li>Explore abstract shape and space.</li> <li>Explore how shapes and negative (empty spaces) can be represented by 3d forms.</li> <li>Manipulate a range of materials, use a range of way to join structures.</li> </ul>			
Year 4	<u><b>Biscuit Bake Off</b></u> <ul style="list-style-type: none"> <li>Select appropriate utensils. Follow a recipe.</li> <li>Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</li> <li>Know that a healthy diet is made up from a variety and balance of different food and drink. Know that to be active and healthy, food and drink are needed to provide energy for the body.</li> </ul>		<u><b>Pneumatics</b></u> <ul style="list-style-type: none"> <li>Choose appropriate mechanisms for a product.</li> <li>Know how mechanical systems create movement.</li> </ul>	<u><b>Cushion</b></u> <ul style="list-style-type: none"> <li>Understand the need for a seam allowance and create an object with one.</li> <li>Select appropriate techniques to decorate textiles.</li> <li>Join textiles using running stitch. Start to measure, tape or pin, cut and join fabric with some accuracy</li> <li>Use the qualities of materials to create suitable and visual and tactile effects in the decoration of textiles.</li> </ul>	<u><b>Torch</b></u> <ul style="list-style-type: none"> <li>Create parallel circuits. Understand how more complex electrical circuits and components can be used to create functional products.</li> </ul>

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Year 5	<p><b><u>Seasonal Bread</u></b></p> <ul style="list-style-type: none"> <li>Understand the importance of correct storage and handling of ingredients including micro-organisms.</li> <li>Demonstrate a range of baking and cooking techniques, using where appropriate, a heat source.</li> <li>Begin to understand that seasons may affect the food available.</li> <li>Begin to understand that different food and drink contain different substances – nutrients, water, and fibre – that are needed for health.</li> </ul>	<p><b><u>Wooden Bridges with Tinker Cad design</u></b></p> <ul style="list-style-type: none"> <li>Cut materials accurately and refine the finish with appropriate tools eg/sanding wood or using a more precise scissor cut after using a rough one.</li> <li>Measure and mark out materials to the nearest millimetre.</li> <li>Understand how to reinforce and strengthen a 3d framework.</li> <li>Use a range of practical skills to independently create products e.g./ cutting, drilling, screwing, nailing, gluing, filling, and sanding.</li> </ul>	<p><b><u>Gears with a simple circuit including motor. Knex (London Eye)</u></b></p> <ul style="list-style-type: none"> <li>Convert rotary motion to linear e.g./make a moving toy using a cam.</li> <li>Understand how mechanical systems such as cams or pulleys or gears create movement.</li> </ul>	<ul style="list-style-type: none"> <li>Join materials with a combination of stitching techniques such as back stitch for seams and running stitch to attach decoration.</li> <li>With confidence, pin, sew and stitch materials together to create a product.</li> </ul>	
Year 6	<p><b><u>Seasonal Birmingham Pie</u></b></p> <ul style="list-style-type: none"> <li>Measure accurately and calculate ratios of ingredients to scale up or scale down from a recipe.</li> <li>Create and refine recipes, including ingredients,</li> </ul>	<p><b><u>Mayan playground</u></b></p> <ul style="list-style-type: none"> <li>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.</li> </ul>			<p><b><u>Burglar and light Alarm</u></b></p> <ul style="list-style-type: none"> <li>Create circuits from kits which use a variety of components eg/ LEDs, resistors, transistors and chips.</li> </ul>

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methods, cooking times and temperatures.

- Understand the seasonality of food.
- Understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

- Use a range of practical skills to independently create products e.g./ cutting, drilling, screwing, nailing, gluing, filling, and sanding.

- Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products
- Write code to control and monitor models or products.
- Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.
- Create circuits from kits which use a variety of components e.g./ LEDs, resistors, transistors and chips.