

## Key Learning in Design and Technology: Year 4

Design	Make	Evaluate									
<p><b>Design</b></p> <ul style="list-style-type: none"> <li>Develop more than one design or adaptation of an initial design.</li> <li>Plan a sequence of actions to make a product.</li> <li>Record the plan by drawing using annotated sketches.</li> <li>Begin to use cross-sectional and exploded diagrams.</li> <li>Use prototypes to develop and share ideas.</li> <li>Think ahead about the order of their work and decide upon tools and materials.</li> <li>Propose realistic suggestions as to how they can achieve their design ideas.</li> <li>Consider aesthetic qualities of materials chosen.</li> <li>Use CAD where appropriate.</li> </ul>	<p><b>Make</b></p> <ul style="list-style-type: none"> <li>Prepare pattern pieces as templates for their design.</li> <li>Cut slots.</li> <li>Cut internal shapes.</li> <li>Select from a range of tools for cutting shaping joining and finishing.</li> <li>Use tools with accuracy.</li> <li>Select from techniques for different parts of the process.</li> <li>Select from materials according to their functional properties.</li> <li>Plan the stages of the making process.</li> <li>Use appropriate finishing techniques.</li> </ul>	<p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>Investigate similar products to the one to be made to give starting points for a design.</li> <li>Draw/sketch products to help analyse and understand how products are made.</li> <li>Research needs of user.</li> <li>Identify the strengths and weaknesses of their design ideas in relation to purpose/user.</li> <li>Decide which design idea to develop.</li> <li>Consider and explain how the finished product could be improved.</li> <li>Discuss how well the finished product meets the design criteria of the user.</li> <li>Investigate key events and individuals in Design and Technology.</li> </ul>									
Autumn	Spring	Summer									
Food	Textiles	Structures	Mechanisms	Food	Textiles	Structures	Mechanisms	Food	Textiles	Structures	Mechanisms
<p><b>Topic:</b> The Tudors</p> <p><b>End Product:</b> (ICT and electrical systems – control and electrical components) Design and make a game incorporating a simple circuit.</p> <p><b>Objective and skills:</b></p> <ul style="list-style-type: none"> <li>Develop vocabulary related to the project.</li> <li>Incorporate a circuit into a model.</li> <li>Use electrical systems such as switches bulbs and buzzers.</li> <li>Use ICT to control products. <b>Light houses</b></li> </ul>	<p><b>Topic:</b> Passport to Europe</p> <p><b>End Product:</b> (Food) Create a savoury pasta bake.</p> <p><b>Objective and skills:</b></p> <ul style="list-style-type: none"> <li>Analyse the taste, texture, smell and appearance of a range of foods (predominantly savoury).</li> <li>Follow instructions/recipes.</li> <li>Join and combine a range of ingredients.</li> <li>Develop understanding of how meat/fish are reared/caught.</li> </ul>										
<p><b>Resources:</b></p> <p>Bulbs</p> <p>Wires</p> <p>Batteries</p> <p>Battery holders</p> <p>Card</p> <p>Variety fastening materials, eg sellotape</p>	<p><b>Resources:</b></p> <p>Range of appropriate vegetables and meats</p> <p>Other appropriate ingredients</p> <p>Simple pasta bake recipe</p> <p>Appropriate cooking utensils</p> <p>Safe knives</p> <p>Chopping boards</p> <p>Ovens</p>										