



## DESIGN TECHNOLOGY

Year Group	End Points
1	<p>A successful designer in Year 1 can:</p> <p><b>Mechanisms</b></p> <ul style="list-style-type: none"> <li>• Select appropriate materials for durability</li> <li>• Create products using levers and wheels</li> </ul> <p><b>Cooking and Nutrition</b></p> <ul style="list-style-type: none"> <li>• Cut ingredients safely and hygienically</li> <li>• Assemble or cook ingredients</li> </ul> <p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Cut materials safely using tools provided</li> <li>• Demonstrate a range of cutting and shaping techniques</li> <li>• Measure and mark out to nearest CM</li> <li>• Demonstrate a range of joining techniques</li> </ul>
2	<p>A successful designer in Year 2 can:</p> <p><b>Textiles</b></p> <ul style="list-style-type: none"> <li>• Shape textiles using a template before decorating and joining pieces using a simple running stitch</li> <li>• Colour and decorate textiles</li> </ul> <p><b>Construction</b></p> <ul style="list-style-type: none"> <li>• Use a range of techniques (e.g. screwing, gluing and nailing) to practise joining skills and strengthening these joints</li> </ul> <p><b>Mechanisms</b></p> <ul style="list-style-type: none"> <li>• Create a product using axels and wheels</li> <li>• Demonstrate a range of joining techniques</li> </ul>
3	<p>A successful designer in Year 3 can:</p> <p><b>Construction</b></p> <ul style="list-style-type: none"> <li>• Choose suitable techniques to construct products or to repair items</li> <li>• Strengthen materials using suitable techniques</li> </ul> <p><b>Cooking and nutrition</b></p> <ul style="list-style-type: none"> <li>• Prepare ingredients safely and hygienically using appropriate utensils</li> <li>• Measure ingredients to the nearest gram</li> <li>• Assemble and cook ingredients (controlling the temperature of the oven or hob if cooking)</li> </ul> <p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Cut materials accurately and safely by selecting appropriate tools</li> <li>• Select appropriate joining techniques</li> <li>• Measure and mark out to the nearest MM</li> <li>• Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut-outs)</li> </ul>

4	<p>A successful designer in Year 4 can:</p> <p><b>Textiles</b></p> <ul style="list-style-type: none"> <li>• Understand the need for a seam allowance</li> <li>• Select the most appropriate techniques to decorate textiles</li> <li>• Include a fastening</li> <li>• Create objects (such as a cushion) that employ a seam allowance</li> <li>• Join textiles with a combination of appropriate stitching techniques</li> </ul> <p><b>Electric and Electronics</b></p> <ul style="list-style-type: none"> <li>• Create parallel circuits</li> <li>• Create series circuits</li> </ul> <p><b>Mechanisms</b></p> <ul style="list-style-type: none"> <li>• Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (e.g. levers, winding mechanisms, pulleys and gears)</li> </ul>
5	<p>A successful designer in Year 5 can:</p> <p><b>Construction:</b></p> <ul style="list-style-type: none"> <li>• Develop a range of practical skills to create products (e.g. cutting, drilling and screwing, nailing, gluing, filling and sanding)</li> </ul> <p><b>Cooking and Nutrition</b></p> <ul style="list-style-type: none"> <li>• Measure accurately and calculate ratios of ingredients to scale up or down from recipe</li> <li>• Create and refine recipes, including ingredients, methods, cooking times and temperatures</li> </ul> <p><b>Electric &amp; Electronics:</b></p> <ul style="list-style-type: none"> <li>• Create circuits using electronics kits that employ several components (e.g. LEDs, resistors, transistors and chips)</li> <li>• Create circuits using electronics kits that employ several components with increasing confidence</li> </ul>
6	<p>A successful designer in Year 6 can:</p> <p><b>Textiles</b></p> <ul style="list-style-type: none"> <li>• Create objects (such as a cushion) that employ a seam allowance</li> <li>• Join textiles with a combination of stitching techniques (e.g. back stitch for seams and running stitch to attach decoration)</li> <li>• Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape)</li> </ul> <p><b>Materials</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 (e.g. the nature of fabric may require sharper scissors than would be used to cut paper)</li> </ul> <p><b>Mechanisms</b></p> <ul style="list-style-type: none"> <li>• Convert rotary motion to linear using cams</li> <li>• Use innovative combinations of electronics (or computing) and mechanics in product designs</li> </ul>