

Design Technology Year 4	
Developing, planning and communicating ideas	<ul style="list-style-type: none"> • Create a final design for their product based on initial ideas and revisions, based on researching existing ideas • Create a detailed plan considering their target audience, design criteria and intended purpose
Working with tools, equipment, materials and components to make quality products	<ul style="list-style-type: none"> • Use equipment and tools with increased accuracy and safety • Select the most effective materials, tools and techniques to use • Manipulate materials effectively using a range of tools and equipment • Measure, cut and assemble accurately
Evaluating processes and products	<ul style="list-style-type: none"> • Think about their ideas as they progress and make changes to improve their work • Assess how well their product works in relation to the design criteria and the intended purpose • Explain how they could improve their design and how the improvement would affect the original outcome
Areas of Study	
Electrical and mechanical components	<ul style="list-style-type: none"> • Refine their products after testing them • Incorporate hydraulics and pneumatics • Use a simple circuit and add components to it <i>eg. Series circuits, bulbs, incorporating switches, buzzers and motors</i> • Make a product which uses both electrical and mechanical components <i>eg levers, linkages, gears, pulleys, cams and pneumatic systems</i>
Construction	<ul style="list-style-type: none"> • Measure accurately to build effective structures • Use a range of techniques to shape and mould • Experiment with a range of techniques to increase stability of structure • Use finishing techniques, showing an awareness of audience - <i>eg sanding/varnishing/glazing</i>
Cooking and Nutrition	N/A
Technical terms related to topic (Key vocabulary)	Related Vocabulary
Greater Depth:	<ul style="list-style-type: none"> • Design and create multiple prototypes demonstrating increasing levels of precision • Independently modify prototypes and design briefs to ensure effective alterations are made to products
Topic/Novel Link:	
Defined End Point	
<ul style="list-style-type: none"> - Further develop, with increased precision, creative, technical and practical expertise related to electrical components, pneumatics and hydraulics; making prototypes, testing and evaluating, to construct increasingly effective products. 	

