



# Lydgate Junior School

## Curriculum Progression for Design Technology



### Core Themes

 <p><b>Investigate</b></p>	 <p><b>Design</b></p>	 <p><b>Make</b></p>	 <p><b>Evaluate</b></p>
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### Curriculum Overview

	Year 3	Year 4	Year 5	Year 6
Block 1	Food: Jacket Potatoes	Mechanics: Roman chariots (wheels and axles)	Food: Bread	Electronics: Lightboxes
Block 2		Structures: Greenhouses (joining and strengthening)	Mechanics: Moving Toys (cams)	Mechanics: Borrowers' houses (pulleys)
Block 3	Textiles: Money Containers			
Block 4	Mechanics: Moving Monsters (pneumatics)	Electronics: Lighthouses (circuits)	Textiles: cushions	Structures: Den Building

## Progression of knowledge and skills

	Year 3	Year 4	Year 5	Year 6
<p><b>DESIGN</b></p> <p><b>Developing, planning and communicating ideas</b></p>	<p>Research existing products to be able to make purposeful designs</p> <p>Generate ideas for an item, considering its purpose and the user/s</p> <p>Identify a purpose and establish criteria for a successful product</p> <p>Make drawings with labels when designing</p> <p>Plan the order of their work before starting</p> <p>Experiment with simple mockups to aid design</p>	<p>Research existing products to be able to make purposeful designs</p> <p>Generate ideas, considering the purposes for which they are designing</p> <p>Evaluate products and identify criteria that can be used for their own designs</p> <p>Make labelled drawings from different views showing specific features</p> <p>Plan, explore, develop and communicate design proposals by modelling ideas</p>	<p>Research existing products to be able to make purposeful designs</p> <p>Generate ideas through brainstorming and identify a purpose for their product</p> <p>Have an awareness of successful designers past and present</p> <p>Draw up a specification for their design</p> <p>Make a selection of drawings, including cross-sectional diagrams showcasing designs</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes to ensure that the product meets the design brief</p> <p>Include the use of ICT to aid design where appropriate.</p>	<p>Research existing products to be able to make purposeful designs</p> <p>Communicate their ideas through detailed labelled drawings and exploded diagrams</p> <p>Have an awareness of successful designers past and present</p> <p>Develop a design specification</p> <p>Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways</p> <p>Plan the order of their work, choosing appropriate materials, tools and techniques and suggesting alternative methods of making if the first attempts fail</p> <p>Use results of investigations, information sources, including ICT when developing design ideas</p>

	Year 3	Year 4	Year 5	Year 6
<p><b>MAKE</b></p> <p><b>Working with tools, equipment, materials and components to make quality products (including food)</b></p>	<p>Select tools and techniques for making their product</p> <p>Measure, mark out, cut, score and assemble components with more accuracy</p> <p>Work safely and accurately with a range of simple tools</p> <p>Think about their ideas as they make progress and be willing to change things if this helps them improve their work</p> <p>Measure, tape or pin, cut and join fabric with some accuracy Sew using a range of different stitches</p> <p>Demonstrate hygienic and safe food preparation and storage</p>	<p>Select appropriate tools and techniques for making their product</p> <p>Measure, mark out, cut shape and join a range of materials, using appropriate tools, equipment and techniques</p> <p>Work safely and accurately with a range of simple tools</p> <p>Join and combine materials and components accurately in temporary and permanent ways</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment</p>	<p>Select appropriate materials, tools and techniques</p> <p>Measure, mark out, cut and join accurately to ensure a high-quality finish</p> <p>Use skills in using different tools and equipment safely and accurately</p> <p>Use a variety of tools safely and accurately with growing independence</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment</p> <p>Measure, tape or pin, cut and join fabric with increasing accuracy Sew using a range of different stitches, weave and knit</p> <p>Apply the rules for basic food hygiene and other safety practices e.g. hazards relating to the use of ovens and other food preparation equipment</p> <p>Weigh and measure accurately (time, dry ingredients, liquids)</p>	<p>Select appropriate tools, materials, components and techniques</p> <p>Using a variety of tools and equipment, measure, mark out, cut and join accurately to ensure a high-quality finish</p> <p>Assemble components and make working models</p> <p>Use a variety of tools safely and accurately with growing independence</p> <p>Construct products using permanent joining techniques Make modifications as they go along</p> <p>Use a variety of finishing techniques to achieve a high- quality product</p>

	Year 3	Year 4	Year 5	Year 6
<b>EVALUATE</b> <b>Evaluating processes and products</b>	<p>Disassemble and evaluate familiar products</p> <p>Evaluate their product against original design criteria e.g. how well it meets its intended purpose</p>	<p>Disassemble and evaluate familiar products</p> <p>Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p> <p>Use simple graphical communication techniques</p>	<p>Disassemble and evaluate similar products, identifying strengths and weaknesses</p> <p>Evaluate a product against the original design criteria</p> <p>Evaluate it personally and seek evaluation from others</p> <p>Conduct a taste test to evaluate a variety of existing food options</p>	<p>Evaluate their products, identify strengths and areas for development, and carry out appropriate and rigorous tests</p> <p>Evaluate against their original criteria and suggest ways that their product could be improved</p> <p>Record their evaluations using drawings with labels</p>