

National Curriculum Coverage D&T

<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks accurately (cutting, shaping, joining and finishing)</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p>	<p>Investigate and analyse a range of existing products</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>Understand how key events and individuals in design and technology have helped shape the world</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>Understand and use mechanical systems in their products (Gears, pulleys, cams, levers, linkages)</p> <p>Understand and use electrical systems in their products (Series circuits incorporating switches, bulbs, buzzers and motors)</p> <p>Apply their understanding of computing to program, monitor and control their products.</p> <p>Understand and apply the principles of a healthy and varied diet</p>	<p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed</p>
<p>DESIGN</p>	<p>MAKE</p>	<p>EVALUATE</p>	<p>TECHNICAL KNOWLEDGE (structures, mechanical systems, electrical systems, computing control)</p>	<p>Cooking and Nutrition</p>



Knowledge, Skills and Understanding Progression Lower Key Stage 2

Year 3

Autumn	<ul style="list-style-type: none">• Sewing – ‘peg dolls’ (parental support) knot, tie off, thread needle, star, running or zig zag stitch• ‘Building’ structures
Spring	<ul style="list-style-type: none">• Bread-based pizza- Knife licence/cutting skills: Bridge, claw and fork secure: some cutting (pre-prepared for stability) & where bread comes from and farming/harvest. Introduce Eat-well plate
Summer	Include... *understand how key events and individuals in design and technology have helped shape the world

Year 4

Autumn	<ul style="list-style-type: none">• Sewing – ‘winter decoration’ knot, tie off, thread needle, variety of stitches• Zoetrope Moving image - structures• Levers & linkages – ‘moving arm’• Lego Robots – coding – to control a product• Burglar alarm – link to science
Spring	<ul style="list-style-type: none">• Filled Tortilla (not making the tortilla) Could change to soup (design & evaluate & invent own adapted recipe) - GYO: Herbs (for soup)? Knife licence/cutting skills: Bridge, claw and fork secure: limited cutting – some pre-prepared & healthy eating and seasonality
Summer	Include... *understand how key events and individuals in design and technology have helped shape the world



Knowledge, Skills and Understanding Progression Upper Key Stage 2

Year 5

Autumn	<ul style="list-style-type: none">• Climate change activities – structure• Rocket – structure• Sewing – ‘space flowers’ collage with fabric, some sewing, some fabric glue• Balloon Buggies – link to science & forces
Spring	<ul style="list-style-type: none">• Salad – design and make, Knife licence/cutting skills: Bridge, claw and fork secure & healthy eating – Foods around the world GYO: salad leaves to add to salad or edible flowers to embellish salad• Gears and pulleys?
Summer	Include... *understand how key events and individuals in design and technology have helped shape the world

Year 6

Autumn	<ul style="list-style-type: none">• Spring Roll (Grab and Go) Knife licence/cutting skills: Bridge, claw and fork secure: Full range of cutting tools, including graters, peelers and scissors & Nutrition and food content link to Health and well-being. GYO spring onions/chives?• Sewing – ‘sock/glove creatures’ – adapt to a theme - sewing on buttons• CAMs – ‘pop-up head’
Spring	<ul style="list-style-type: none">• Wire-loop game – science link – electricity• Earth Day invention – science linked• Computing unit - 3D modelling – TinkerCAD
Summer	Include... *understand how key events and individuals in design and technology have helped shape the world