

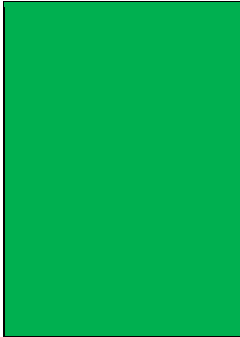
# Knaphill Design and Technology Curriculum

Key Stage 2	Year 3	Year 4	Year 5	Year 6
<b>Design</b>	<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>Plan the order of their work before starting.</p> <p>Explore, develop and communicate design proposals by modelling ideas.</p> <p>Make drawings with labels when designing.</p>	<p>Generate ideas, considering the purposes for which they are designing.</p> <p>Make labelled drawings from different views showing specific features.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Evaluate products and identify criteria that can be used for their own designs.</p>	<p>Generate ideas through brainstorming and identify a purpose for their product.</p> <p>Draw up a specification for their design.</p> <p>Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail.</p> <p>Use results of investigations, information sources, when developing design ideas.</p>	<p>Communicate their ideas through detailed labelled drawings, including exploded and flat pack diagrams.</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.</p>

<p style="text-align: center;"><b>Make</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 progress and be willing change things if this improves their work.</p> <p>Measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Sew using a range of techniques.</p> <p>Demonstrate hygienic food preparation and storage.</p>	<p>Select appropriate tools and techniques for making their product.</p> <p>Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>Join and combine materials and components accurately in temporary and permanent ways.</p> <p>Demonstrate hygienic food preparation and storage.</p> <p>Use simple graphical communication techniques.</p>	<p>Select appropriate materials, tools and techniques.</p> <p>Measure and mark out accurately.</p> <p>Use skills in using different tools and equipment safety and accurately.</p> <p>Accurately apply a range of finishing techniques, including those from art and design.</p> <p>Use techniques that involve a number of steps.</p> <p>Demonstrate resourcefulness, e.g. Demonstrate hygienic food preparation and storage.</p>	<p>Select appropriate tools, materials, components and techniques.</p> <p>Assemble components make working models.</p> <p>Use tools safely and accurately.</p> <p>Construct products using permanent joining techniques.</p> <p>Make modifications as they go along.</p> <p>Pin, sew and stitch materials together create a product.</p> <p>Achieve a quality product.</p>
--	--	--	--	--

<p><b>Evaluate</b></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>Evaluate the effectiveness of existing products.</p>	<p>Evaluate a product against the original design specification.</p> <p>Evaluate it personally and seek evaluation from others.</p> <p>Evaluate the effectiveness of existing products, thinking about why the designer has created this product like this.</p>	<p>Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Record their evaluations using drawings with labels.</p> <p>Evaluate the effectiveness of existing products, thinking about potential improvements and incorporating them into their own design.</p>
<p><b>Technical knowledge</b></p>	<p>Understand how levers and linkages or pneumatic systems create movement.</p> <p>Understand how simple electrical circuits and components can be used to create functional products.</p> <p>Understand how to program a computer to control their products.</p> <p>Know how to make strong, stiff shell structures.</p> <p>Know that a single fabric shape can be used to make a 3D textiles product.</p>		<p>Understand how cams, pulleys and gears create movement.</p> <p>Know how to reinforce/strengthen a 3D framework.</p> <p>Know that a 3D textiles product can be made from a combination of fabric shapes.</p> <p>Know that a recipe can be adapted a by adding or substituting one or more ingredients.</p>	

	<p>Know that food ingredients can be fresh, pre-cooked and processed.</p>	
<p>Cooking and nutrition</p>	<p>Know that a healthy diet is made up from a variety and balance of different foods and drinks, as depicted in the 'eat well' plate.</p> <p>Know that to be active and healthy, food is needed to provide energy for the body.</p> <p>Measure using grams.</p> <p>Follow a recipe.</p> <p>Know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Know that seasons may affect the food available.</p> <p>Understand how food is processed into ingredients that can be eaten or used in cooking.</p> <p>Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p>	<p>Know that recipes can be adapted to change the appearance, taste, texture and aroma.</p> <p>Know that different foods contain different substances - nutrients, water and fibre - that are needed for health.</p> <p>Understand the need for correct storage.</p> <p>Measure accurately.</p> <p>Work out ratios in recipes.</p> <p>Know that food is grown, reared and caught in the UK, Europe and the wider world.</p> <p>Know that seasons may affect the food available.</p> <p>Understand how food is processed into ingredients that can be eaten or used in cooking.</p> <p>Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.</p>



Know to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.

Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.