

# St Richard Reynolds Catholic Primary School Design and Technology Skills and Knowledge Progression

Curriculum Aims	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Design</b>	<p>Create simple design for a product based on a design criteria.</p> <p>Communicate ideas through talking, words and drawing.</p>	<p>Design purposeful, functional and appealing products.</p> <p>Create, model, develop ideas through templates and communication technology.</p>	<p>Use prior knowledge to design a product functionally.</p> <p>Create designs using annotated drawings.</p>	<p>Use prior knowledge to design a product functionally which has purpose and appealing to an audience.</p> <p>Use cross-sectional diagrams to create designs.</p>	<p>Apply research and theory to support design criteria to make an innovative product.</p> <p>Use prototypes to show ideas.</p>	<p>Use research to develop design criteria to match functionality and aim of audience.</p> <p>Generate, develop and model ideas through cross-sectional and exploded diagrams. Use prototypes and computer-aided design.</p>
<b>Make</b>	<p>Safely select and use a range of tools and equipment to cut, join and finish components safely.</p> <p>Use a wide range of components for construction including materials and textiles.</p>	<p>Safely measure, mark out, cut and shape materials using a variety of tools.</p> <p>Choose the appropriate tools, equipment and techniques for the given task.</p> <p>Use finishing techniques including those from art and designs.</p>	<p>Safely measure, mark out, cut and shape materials using a variety of tools with some accuracy.</p>	<p>Use techniques, which require more accuracy in cutting, shaping and joining his/her work.</p>	<p>Accurately measure, mark out, cut and shape materials and components.</p> <p>Accurately assemble, join and combine materials and components.</p> <p>Accurately apply a range of finishing techniques, including those from art and design</p>	<p>Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities.</p> <p>Demonstrate resourcefulness when tackling practical problems</p>
<b>Evaluate</b>	<p>Begin to ask simple questions about existing products and those they have chosen to make.</p>	<p>Evaluate and assess the practicality of existing products and those that they have chosen to make.</p>	<p>Begin to investigate and analyse the practicality of existing products and those they have chosen to make with consideration of a wide range of factors.</p>	<p>Consider how existing products and finished products can be improved to meet the intended user.</p>	<p>Make detailed evaluations about existing products and take into consideration peers opinions to improve and amend products.</p>	<p>Use knowledge of research and artists to further explain the effectiveness of existing products and products they have made.</p>