



St. Aloysius Catholic Primary School

Design Technology- Progression of Skills

Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<u>Background research- Lesson 1</u>	<ul style="list-style-type: none"> -To understand what a product is and who it is for -To understand how a product works and how it is used, -To identify where you might find this product 	<ul style="list-style-type: none"> . -To understand what a product is and who it is for -To understand how a product works and how it is used, -To identify where you might find this product -To identify the materials used to make the product 	<ul style="list-style-type: none"> -To identify who made the product, when it was made and what its purpose is. -To identify what the product has been made from -To begin to evaluate the product on design and use. 	<ul style="list-style-type: none"> -To identify who made the product, when it was made and what its purpose is. -To identify what the product has been made from -To begin to evaluate the product on design and use. -To research facts about famous inventors/chefs/designers etc linked to the product. 	<ul style="list-style-type: none"> -To identify who made the product, when it was made and what its purpose is. -To identify what the product has been made from and how environmentally friendly the materials are. -To evaluate the product on design, appearance and use, -To identify the cost to make the product. --To research facts about famous inventors/chefs/designers etc linked to the product 	<ul style="list-style-type: none"> -To identify who made the product, when it was made and what its purpose is. -To identify what the product has been made from and how environmentally friendly the materials are. -To evaluate the product on design, appearance and use, To identify the cost to make the product and whether it has any other purposes eg) leading innovation of the time, trend setting. --To research facts about famous inventors/chefs/designers etc linked to the product
<u>Lesson 2- Design Criteria</u>	Explain what product they will	-Use their own experiences and	-Understand and gather information	-Understand and gather information about what a	Understand and gather information using	-All of Year 5 plus the following:

<p>Exploring context and existing products</p>	<p>be designing and making</p> <p>Explaining who their product will be used by</p> <p>Describe what their product will be used for.</p>	<p>existing products to develop ideas</p> <p>Explain what product they will be designing and making</p> <p>Explain who their product will be used by</p> <p>Describe what their product will be used for and how it will work</p> <p>Explain why their product is suitable for the intended user.</p>	<p>about what a particular group of people want from a product</p> <p>-Describe the purpose of their product and how it will work</p> <p>Identify design features that will appeal to their intended users</p> <p>Explain how parts of their product work</p> <p>Generate realistic ideas that meet the needs of their user</p>	<p>particular group of people want from a product</p> <p>-Describe the purpose of their product and how it will work</p> <p>Identify design features that will appeal to their intended users</p> <p>Explain how parts of their product work</p> <p>-Develop their own design criteria and use for planning ideas.</p> <p>-Generate realistic ideas that meet the needs of their user and take into account the availability of resources</p>	<p>questionnaires, surveys etc.</p> <p>Describe the purpose of their product</p> <p>-Identify design features that will appeal to their intended user</p> <p>Explain how parts of their product will work</p> <p>Develop their own design criteria and use for planning ideas</p> <p>Generate innovative ideas that meet the needs of the user and take into account availability of resources.</p>	<p>Create a design description for their product</p> <p>Highlight the impact of time, resources and cost within their design ideas.</p> <p>Generate innovative ideas that meet the needs of their user.</p>
<p>Skill</p>	<p>Year 1</p>	<p>Year 2</p>	<p>Year 3</p>	<p>Year 4</p>	<p>Year 5</p>	<p>Year 6</p>
<p>Lesson 3- Planning</p> <p>Communicating ideas and creating prototypes for products.</p>	<p>Discuss what their steps for making could be</p> <p>Represent ideas through talking and drawing</p>	<p>Discuss what their steps for making could be',</p> <p>Represent ideas through talking, drawing and</p>	<p>Order the main stages of making</p> <p>Choose materials to use based on suitability of their properties.</p>	<p>Share and discuss ideas with others making some recommendations for improvement</p> <p>Choose materials based on their suitability of</p>	<p>,Share and discuss ideas with others.</p> <p>Record a step by step plan for making</p> <p>Produce lists for the tools, equipment and</p>	<p>All of Year 5 plus the following:</p> <p>Choose materials to use based on suitability of their properties and aesthetic qualities.</p>

		<p>computing- (where appropriate)</p> <p>Choose materials to use based on suitability of their properties.</p> <p>Create templates/patterns pieces and explore materials whilst developing ideas</p>	<p>Represent ideas in diagrams, annotated sketches and computer based programmes.</p> <p>Create pattern pieces and prototypes.</p>	<p>properties and begin to make justifications</p> <p>Represent ideas in diagrams, annotate sketches and computer based programmes.</p> <p>-Begin to plan for health and safety considerations.</p>	<p>materials they will be using.</p> <p>Choose materials to use based on suitability of their properties and aesthetic qualities.</p> <p>Represent ideas in diagrams, cross sectional drawing and computer based programmes.</p>	
Skill	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><u>Lesson 4-5 Making</u></p> <p>Across KS1 Use materials- construction materials and kits, textiles, food and mechanical components.</p> <p>Across KS2 Use materials- construction materials and kits, textiles, food mechanical and electrical components.</p>	<p>Choose suitable tools for making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components</p>	<p>Choose suitable tools for making explaining why they should be used</p> <p>Follow safety and food hygiene procedures</p> <p>Follow safety and food hygiene procedures</p> <p>Join, assemble and combine materials and components</p> <p>Use finishing techniques</p>	<p>Choose suitable tools for making whilst explaining why they used be used.</p> <p>Use their design criteria whilst making</p> <p>Follow safety and food hygiene procedures</p> <p>Measure, mark, cut and shape materials and components with accuracy.</p>	<p>All of Year 3 plus:</p> <p>-Measure accurately to build effective structures</p> <p>-Experiment with a range of techniques to increase stability in a structure</p> <p>Use finishing techniques, showing an awareness of audience</p> <p>Consider which materials are fit for purpose and join them appropriately</p>	<p>Choose suitable tools for making whilst explaining why they should be used</p> <p>Follow and make recommendations for hygiene procedures.</p> <p>Measure, mark, cut and shape materials and components accurately</p> <p>Demonstrate problem solving skills when encountering a mistake or practical problem</p>	<p>-Select from and use a wider range of tools and equipment to perform practical tasks for example cutting, shaping, joining and finishing accurately</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>

		including skills learnt in Art			Use finishing techniques including skills learnt in Art accurately.	
<u>Lesson 6 - Evaluation Referring to planning and initial ideas in evaluating their product</u>	<p>Talk about their design ideas and what they have made</p> <p>Make simple judgments of how the product met their design ideas</p>	<p>Talk about their design ideas and what they have made</p> <p>Make simple judgments of how the product met their design ideas</p> <p>Suggest how their product could be improved</p>	<p>Use design criteria to evaluate their product-identifying both strengths and areas for development</p> <p>Consider the views of others, including intended user whilst evaluating the product.</p>		<p>Use design criteria to evaluate their product-identifying both strengths and areas for development.</p> <p>Consider the views of others, including intended user, whilst evaluating the product.</p>	<p>Use design criteria to evaluate the product-looking at the quality of the end product and design. Assess whether it is fit for its intended purpose.</p> <p>Consider the views of others, including intended user, whilst evaluating product.</p>
<u>Examples of deeper thinking questions</u>	<p>What could you change about your design? How could you make your design faster/stronger etc? What do you like about someone's else design? What would happen if you changed...?</p>	<p>What could you do to make you design better? Find one thing that is better about someone else's design. How would you help someone who wanted to make their own...? What is the best/ worst thing about your design?</p>	<p>What could you change to improve your design?</p> <p>What made creating your design difficult?</p> <p>What questions would you ask if.....?</p>	<p>Explain what you could change and how it would improve your design</p> <p>How would you change your design for the 'real world'?</p> <p>How effective at....is your...?</p>	<p>How could you make your design more suited to mass production?</p> <p>What developments would need to be made for your design to.....?</p> <p>What tests would you need to do to....?</p>	<p>What would you need to change to be able to sell your design?</p> <p>How could you adapt... to make....?</p> <p>What do you predict would happen if....?</p> <p>Judge whether..... would cause/ change/affect</p>