



# Ferndale Primary and Nursery School

## DT: Year 5

Projects	Design: develop, plan and communicate ideas	Make: working with tools, equipment, materials and components to make quality products.	Evaluate: processes and products	Technical knowledge: materials and structures	Technical knowledge: mechanisms	Technical knowledge: textiles	Technical knowledge: electrical systems	Technical knowledge: food and nutrition
<p>Pulleys and gears T2 Celebrating cultural food T4 Textiles joining T6</p>	<p>Design with the user in mind, collecting and using research and identifying features that will suit the demands and needs.</p> <p>Describe and design by producing logical, realistic plans. Create a range of ideas using cross-sectional planning and annotated sketches. Model and refine ideas by making prototypes. Use computer aided designs.</p> <p><i>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit</i></p>	<p>Can select from a wider range of tools and materials, giving reasons for their choices and beginning to evaluate their efficiency. Can use a wider range of tools and equipment to perform tasks with accuracy. Select materials according to their properties.</p> <p><i>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 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.</i></p>	<p>Evaluate their work against their own design specification and through testing. Evaluate work during and at the end of the project, seeking ideas from others. Give suggestions for how different processes and materials might improve the product.</p> <p>Disassemble and evaluate existing products, giving reasons for how well they fit the purpose. Make links to materials and sustainability.</p> <p>Evaluate key events and individuals that have helped shape the world of Design and Technology.</p> <p><i>Investigate and analyse a range of existing products.</i></p>	<p>Select and join materials carefully considering intended use of the product. Measure accurately and use tools safely to ensure precision. Ensure product is strong and fit for purpose. Begin to reinforce and strengthen 3D product.</p> <p>T2</p> <p><i>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</i></p>	<p>Grow in confidence when trying new ideas. Refine product after testing. Use gears, pulleys and cams.</p> <p>T2</p> <p><i>Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].</i></p> <p><i>Apply their understanding of computing to program, monitor and control their products.</i></p>	<p>Give reasons for selected textiles. Use joining techniques to make a product stronger. Use techniques such as back stitch for joining and running stitch for decoration.</p> <p>T4</p>	<p>Create a circuit within a product, incorporating other components. Evaluate how adding a circuit can improve the product. Program a computer to control the product.</p> <p><i>Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].</i></p> <p><i>Apply their understanding of computing to program, monitor and control their products.</i></p>	<p>Understand where food is grown and be able to talk about seasonality. Design products that are balanced and healthy for us. Talk about why are dishes are healthy and create a varied diet.</p> <p>Select ingredients, prepare and cook dishes (predominantly savoury), that are attractive, fit for purpose and interesting.</p> <p>Use some of the skills of peeling, chopping, slicing, grating, spreading, kneading and baking.</p> <p>T4 <i>Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</i></p>



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<p><i>for purpose, aimed at particular individuals or groups.</i></p> <p><i>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i></p>		<p><i>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</i></p> <p><i>Understand how key events and individuals in design and technology have helped shape the world.</i></p>					
Language Enrichment	First Hand Experiences		Purpose / Life Skills		Previous Knowledge		
<p>Discussing what they do at home, what they already know – shared prior knowledge</p> <p>Vocab displays</p> <p>Modelling language use from teacher</p> <p>Questioning</p> <p>Group discussions</p> <p>Video clips</p>	<ul style="list-style-type: none"> <li>Baked bread</li> <li>Cooked individual pasties that children prepped, cooked and ate</li> <li>Measuring and sawing wood</li> <li>Making motorized pulley using an electrical circuit to drive buggy</li> </ul>		<p>Understanding all the stages of a project and seeing it through</p> <p>Designing something for a purpose</p> <p>Understanding how to eat healthily and prep food safely</p> <p>Safety in the kitchen - knife skills</p> <p>Making a Christmas decoration</p>		<ul style="list-style-type: none"> <li>Forces (science link)</li> <li>Circuits (science link)</li> <li>Design process</li> <li>Healthy eating (Jigsaw)</li> <li>Cooking</li> </ul>		



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