

# Mersey Park Primary School Design and Technology Long Term Overview – Year 6



	Target Tracker Assessment Focus	Weaving Knowledge, Skills and Understanding
<b>Cooking and Nutrition: Two course meal and drink</b>		
	<ul style="list-style-type: none"> <li>• Confidently plan a series of healthy meals based on the principles of a healthy and varied diet</li> <li>• Use information on food labels to inform choices</li> <li>• Research, plan and prepare and cook a savoury dish applying his/her knowledge of ingredients and his/her technical skill</li> </ul>	<p>During KS2 pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• understand and apply the principles of a healthy and varied diet</li> <li>• prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</li> <li>• understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> </ul> <p>Breadth of study:</p> <ul style="list-style-type: none"> <li>• Can they explain how their product should be stored with reasons?</li> <li>• Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?</li> </ul>
<b>Processes: Viking shoe, Bridge</b>		
<p>Developing planning and communicating ideas</p>	<ul style="list-style-type: none"> <li>• Use research he/she has done into famous designers and inventors to inform the design of his/her own innovative products</li> <li>• Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>	<p>During KS2 pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul> <p>Breadth of study:</p> <ul style="list-style-type: none"> <li>• Can they use a range of information to inform their design?</li> <li>• Can they use market research to inform plans?</li> <li>• Can they justify design in relation to the audience?</li> <li>• Can they work within constraints?</li> <li>• Can they follow and refine their plan if necessary?</li> <li>• Can they justify their plan to someone else?</li> <li>• Do they consider culture and society in their designs?</li> <li>• Have they thought about how their product could be sold?</li> </ul>
<p>Working with tools, equipment, materials and components to make quality products</p>	<ul style="list-style-type: none"> <li>• Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities</li> <li>• Use technical knowledge and accurate skills to problem solve during the making process</li> </ul>	<p>During KS2 pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately</li> <li>• 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</li> </ul> <p>Breadth of study:</p> <ul style="list-style-type: none"> <li>• Can they use tools and materials precisely?</li> <li>• Can they justify why they selected specific materials?</li> </ul>

<p>Textiles</p> <p>Stiff and flexible sheet materials</p> <p>Mouldable materials</p>		<ul style="list-style-type: none"> <li>• Can they justify why the chosen material was the best for the task?</li> <li>• Did they consider the use of the product when selecting materials?</li> </ul>
<p>Evaluating processes and products</p>	<ul style="list-style-type: none"> <li>• Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she has made</li> </ul>	<p>During KS2 pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• investigate and analyse a range of existing products</li> <li>• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</li> <li>• understand how key events and individuals in design and technology have helped shape the world</li> </ul> <p>Breadth of study:</p> <ul style="list-style-type: none"> <li>• Do they change the way they are working if needed?</li> <li>• How well do they test and evaluate their final product?</li> <li>• Have they given considered thought about what would improve their product even more?</li> <li>• Is it fit for purpose?</li> <li>• Would different resources have improved their product?</li> <li>• Would they need more or different information to make it even better?</li> <li>• Does their product meet all design criteria?</li> </ul>
<p>Electrical and mechanical components</p>	<ul style="list-style-type: none"> <li>• Apply his/her understanding of computing to program, monitor and control his/her product</li> </ul>	<p>During KS2 pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• understand and use mechanical systems in their products, (for example as gears, pulleys, cams, levers and linkages)</li> <li>• understand and use electrical systems in their products, (for example series circuits incorporating switches, bulbs, buzzers and motors)</li> <li>• apply their understanding of computing to programme, monitor and control their products.</li> </ul> <p>Breadth of study:</p> <ul style="list-style-type: none"> <li>• Can they use different kinds of circuit in their product?</li> <li>• Can they think of ways in which adding a circuit would improve their product?</li> </ul>
<p>Construction</p>	<ul style="list-style-type: none"> <li>• Use a wide range of methods to strengthen, stiffen and reinforce complex structures and use them accurately and appropriately</li> </ul>	<p>During KS2 pupils should be taught to:</p> <ul style="list-style-type: none"> <li>• apply their understanding of how to strengthen, stiffen and reinforce more complex structures</li> </ul> <p>Breadth of study:</p> <ul style="list-style-type: none"> <li>• How have they ensured that their work is precise and accurate?</li> <li>• Can they hide joints so as to improve the look of their product?</li> </ul>