

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



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

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