

Design and Technology Curriculum Long Term Planning

		Product Design	Food Technology	Textiles	Graphics
Year 7	Big Idea	<p><b>Block Heads</b> Are traditional toys still relevant in the 21<sup>st</sup> Century?</p>	<p><b>Eatwell Guide</b> What does a healthy diet look like?</p>	<p><b>Soft Sculpture</b> Where do natural fibres come from?</p>	<p><b>Personified Typography</b> What is personification?</p>
	Key Knowledge and skills	<p>Pupils are introduced to specific tools and machinery and learn how to use these safely and correctly.</p> <ul style="list-style-type: none"> <li>• Coping And Tenon Saws</li> <li>• File</li> <li>• Scroll Saw</li> <li>• Band-facer</li> <li>• Pillar Drill</li> <li>• Cut and shape man made wood/natural wood</li> <li>• Measuring and Accuracy</li> </ul>	<p>Pupils are introduced to hygiene and safety in the food room and an introduction to the hazards in the kitchen</p> <ul style="list-style-type: none"> <li>• Eatwell Guide</li> <li>• Focus on nutrition</li> <li>• Using fruit, vegetables, pasta, fibre foods</li> <li>• Planning meals</li> <li>• Target groups</li> <li>• Seasonality</li> <li>• Food labelling</li> <li>• Food sources</li> <li>• Knife skills</li> <li>• Use of cooker and cooking methods</li> <li>• Weighing ingredients</li> <li>• Using a hob</li> </ul>	<p>Pupils are introduced to specific tools and equipment and learn how to use these safely and correctly.</p> <ul style="list-style-type: none"> <li>• Classification of fibres – Plant and Animal based</li> <li>• Designer influence – Lucy Sparrow</li> <li>• Design Process</li> </ul>	<p>Pupils are introduced to graphic communication. Pupils will look at the link between the art classes and the DT.</p> <ul style="list-style-type: none"> <li>• Formal elements</li> <li>• Shape</li> <li>• Colour</li> <li>• Line</li> <li>• Process of sketching</li> <li>• Graphical word representation</li> <li>• Colour rendering</li> <li>• Design influence is Paul Thurlby</li> <li>• Health and safety – correct and safe use of graphic materials and equipment</li> </ul>

	End Point	Pupils create a final piece that is accurately measured, has accurate holes drilled, fine finishing skills and surface decoration.	Pupils can design and execute a range of items including fruit salad, omelette, pizza baguette and pasta salad.	Final piece of applique work based on a crisp packet	Final piece produced.
Year 8	Big Idea	<b>Sweet Dispenser</b> Does the use of an industrial production system enhance manufacturing efficiency?	<b>Energy Needs and Food Commodities</b> Do you know where your food comes from?	<b>Print Tote Bag</b> Can you design and manufacture products safely and accurately?	<b>Memphis Design Smoothie Label</b> What is the impact of design movements on visual aesthetics?
	Key Knowledge and skills	Pupils learn how to complete a simple product analysis and how this can then be used to shape their own design ideas. <ul style="list-style-type: none"> <li>How to draw in isometric projection and how this technique can help them draw in three dimensions effectively in order to communicate their design ideas and thinking.</li> <li>How to shape a circle using a jig and how using templates can help to improve the quality of an outcome.</li> <li>How to create simple moving parts using wood joining techniques and are introduced to Forstner</li> </ul>	Pupils continue to build confidence in a kitchen, working to hygiene and safety rules in the food room <ul style="list-style-type: none"> <li>Eatwell Guide</li> <li>Focus on nutrition</li> <li>Using fruit, vegetables, pasta, fibre foods</li> <li>Planning meals</li> <li>Target groups</li> <li>Seasonality</li> <li>Food labelling</li> <li>Food sources</li> <li>Knife skills</li> <li>Use of cooker</li> <li>Weighing ingredients</li> <li>Using a hob</li> </ul>	Pupils are introduced to the project using a design context, brief and analysis <ul style="list-style-type: none"> <li>Looking at batik</li> <li>Block printing</li> <li>Operating a sewing machine safely</li> <li>Inspiration by African textiles</li> <li>Cotton production and industry</li> <li>Fairtrade and organic farming methods</li> <li>Basic construction skills</li> <li>Applique and embellishment</li> <li>Health and safety</li> <li>Product evaluation</li> </ul>	Pupils to apply their knowledge of Memphis to a smoothy carton design. <ul style="list-style-type: none"> <li>Different types of papers and manufacturing, sizes and types</li> </ul> Making Techniques <ul style="list-style-type: none"> <li>CAD Design</li> <li>CAD pattern repeats</li> <li>Drawing styles such as pictorial, isometric, perspective and colour rendering</li> <li>Design brief and analysis</li> <li>Health and safety linked to both practical and PC</li> </ul>

		drill bits and how to use these safely.			
	End Point	Pupils create a final piece that is accurately measured, has accurate holes drilled, fine finishing skills and surface decoration.	Pupils can design and execute a range of items including Chicken Nuggets and Sweet Potato Wedges Savoury Wraps Bolognese and pasta Cinnamon and Apple Tray Bake	Final piece of applique work based on themes studied.	Final piece produced.
Year 9	Big Idea	<b>Pull Along Toy</b> What is Sustainable Design? How do we iterate?	<b>Food Safety and International Foods</b> How can culture enhance your food enjoyment?	<b>Graffiti Cushion</b> How can we transfer our designs onto fabric?	<b>Event Poster</b> How are graphics used to promote events?
	Key Knowledge and skills	Pupils will build an understanding of the key concepts that underpin sustainable design. They will consider the project from the needs of another user in order to create a children's toy that is both fun and educational. <ul style="list-style-type: none"> <li>Iteration will be a key theme throughout this project. Pupils solve the design problem predominantly through card and MDF modelling rather than a drawing/design based approach.</li> </ul>	Pupils continue to work in a kitchen using hygiene and safety in the food room knowledge <ul style="list-style-type: none"> <li>Eatwell Guide</li> <li>Focus on nutrition</li> <li>Using fruit, vegetables, pasta, fibre foods</li> <li>Planning meals</li> <li>Target groups</li> <li>Seasonality</li> <li>Food labelling</li> <li>Food sources</li> <li>Knife skills</li> <li>Use of cooker</li> </ul>	Main Material - Cotton, Cotton theory/ Woven Fabric construction Making Techniques - Resist Dying technique - Tie dye, fabric paint, fabric pens, Machine stitching - straight stitch, reverse stitching & machine applique, using patterns, Hems, Seams, fastenings and finishing fabrics. Design Process - Design Brief & Analysis, Mood board, Client Profile, Specification, Colour theory, 2D sketched ideas, Drawing to scale	Nikki Farquharson -Design influence Paper types and sizes Making techniques CAD – Photoshop/PowerPoint Composition and layout Formal elements of art Colour theory Typography Size Printing finishes Design processes Design brief Design analysis Mood board Drawing skills Perspective



		<ul style="list-style-type: none"> <li>• The 3 main resistant materials will be covered from an environmental impact perspective. Thereby enabling pupils to assess environmental impact of each material.</li> <li>• 3D Isometric Drawing will be reinforced alongside high quality material rendering techniques.</li> <li>• Testing and Evaluation will be thorough so that a detailed understanding is built about the cyclical nature of the design process and continuous product improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Weighing ingredients</li> <li>• Using a hob</li> <li>• Labelling on food, the nutritional Traffic light labelling and Allergens</li> <li>• Foods affecting food choice and seasonal ingredients.</li> </ul>		<p>Specification 2D final idea Scanning and digitally transfer of idea</p> <ul style="list-style-type: none"> <li>• Digital editing using PowerPoint and photoshop</li> <li>• Health and safety use of using graphic specific materials and equipment.</li> </ul>
End Point	Pupils have considered all aspects of the design process, to design, model, measure environmental impact and use 3D design for a child pull along toy.	A Pupils can design and execute a range of items including American Sweet Fruit Muffins and Savoury Vegetable Muffins Kebab Lemon Drizzle Chicken Curry	Pupils will produce a cushion, encompassing graffiti style design.	Pupils will consider the design process to design, develop and create an events poster.	



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