

# Curriculum Map 2021/2022



## YEAR 8 Technology

Each rotation may be completed at different times of the year, and not necessarily in the following order.	Autumn 1a	Autumn 1b	Spring 2a	Spring 2b	Summer 3a	Summer 3b		
	Rotation 1 wks 1-10		Rotation 2 wks 11-20		Rotation 3 wks 21-30		Rotation 4 wks 31-40	
<b>CONTENT</b> <i>Declarative / core / powerful</i> Knowledge – ‘Know What’	Catering		Textile Design		Engineering		CAD/CAM	
<b>Skills</b> <i>Procedural Knowledge – ‘Know How’</i>	Students need to be able to: <ul style="list-style-type: none"> <li>Adapt a recipe to allow for dietary requirements</li> <li>Plan a well-balanced dish</li> <li>Create a roux sauce</li> <li>Use yeast</li> <li>Understand nutrition</li> <li>Explain safe cooking temperatures</li> <li>Explain the function of eggs</li> </ul>		Students need to be able to: <ul style="list-style-type: none"> <li>Understand the design process</li> <li>Create a range of designs that meets the design brief</li> <li>Assess existing products.</li> <li>Experiment with a range of different textile techniques’ such as tie dye, batik and applique.</li> <li>Further develop their designs based on the results from their experimentation</li> </ul>		Students need to be able to: <ul style="list-style-type: none"> <li>Understand the properties of Acrylic, and thermoset and thermos plastics</li> <li>Understand and apply their knowledge of a range of design movements</li> <li>Analyse existing products</li> <li>Create a design that links to the design brief</li> <li>Develop workshop skills using the following hand tools; Belt sander, Sand paper, Wet and Dry paper, Files, Coping Saw, Solvent</li> </ul>		Students need to be able to: <ul style="list-style-type: none"> <li>Understand how to use CAD software</li> <li>To learn how to use both sketch up and 2D Design software</li> <li>To be able to create a drawing of an isometric ruler using CAD</li> <li>To export CAD design to CAM equipment (laser cutter)</li> </ul>	

		<ul style="list-style-type: none"> <li>Research into textile artist Sophie Standing and using her as inspiration to further develop the designs</li> <li>Construct a pencil case to a high standard</li> </ul>	<p>cement, Heat gun and Strip/Line bender</p> <ul style="list-style-type: none"> <li>To show high standards of outcome. Identifying where problems may occur in order to avoid them</li> </ul>	
<b>Key Questions</b>	<ul style="list-style-type: none"> <li>What role does the yeast play in bread making?</li> <li>How does kneading effect the gluten in bread making?</li> <li>Which ingredient helps the quiche "set"?</li> <li>Which ingredient is high risk?</li> <li>What does nutritional value mean?</li> <li>What is Hydration?</li> <li>Compare and contrast 2 pizzas from a supermarket.</li> <li>How could you adapt the recipe for a Coeliac?</li> </ul>	<ul style="list-style-type: none"> <li>What is the purpose of your product? How will you make sure the product is fit for purpose?</li> <li>What will your product look like? Why will this suit your target audience?</li> <li>What type of materials will you use? What will make these suitable for the product?</li> <li>How many will you make?</li> <li>How much will it cost?</li> <li>How could you keep the costs of materials down?</li> </ul>	<ul style="list-style-type: none"> <li>How did you ensure your egg stand was of a high quality when making your egg stand?</li> <li>Analyse an existing clock using ACCESS FM.</li> <li>Does this product follow form or function? Explain your statement.</li> <li>Explain how you think this clock is made, support your statement by explaining why you think this.</li> <li>Explain how my designs reflect Alessi or Memphis</li> </ul>	<ul style="list-style-type: none"> <li>Identify the best tool to draw a curve</li> <li>How can you duplicate parts of your drawing?</li> <li>How can you export your drawing to CAM equipment?</li> <li>How can you create an isometric cube?</li> </ul>
<b>Assessment</b>	<p>Students will be assessed 3 times during this rotation, demonstrating the following learning objectives;</p> <p><b>Assessment 1 - Bread</b></p> <ul style="list-style-type: none"> <li>To prepare and cook a dish using yeast dough</li> </ul>	<p>Students will be assessed 3 times during this rotation, demonstrating the following learning objectives;</p> <p><b>Assessment 1</b></p> <ul style="list-style-type: none"> <li>Using Sophie Standing as inspiration to design a range</li> </ul>	<p>Students will be assessed 3 times during this rotation, demonstrating the following learning objectives;</p> <p><b>Assessment 1</b></p> <ul style="list-style-type: none"> <li>To be able to analyse an existing product, to show an</li> </ul>	<p>Students will be assessed 3 times during this rotation, demonstrating the following learning objectives;</p> <p><b>Assessment 1</b></p> <p>Demonstrate learnt skills using 2D design by replicating the</p>

	<ul style="list-style-type: none"> <li>• To demonstrate the skills of preparing, kneading, shaping and finishing yeast dough</li> </ul> <p><b>Assessment 2 - Quiche</b></p> <ul style="list-style-type: none"> <li>• To demonstrate the skills of rolling pastry and lining a flan tin, preparing filling ingredients, using a variety of small equipment, using the oven.</li> <li>• To demonstrate the function of egg in cooking (setting)</li> <li>• To demonstrate and apply the principles of food safety and hygiene when cooking.</li> </ul> <p><b>Assessment 3 – Pizza Design</b></p> <ul style="list-style-type: none"> <li>• To investigate the dietary needs of young adolescents, including the importance of hydration.</li> <li>• To analyse the pizza from the school canteen.</li> <li>• To design a pizza suitable for a hot school lunch to help meet the nutritional needs of young adolescents.</li> <li>• To create a nutritional analysis to be placed on the pizza box</li> </ul>	<p>of initial designs that meet the objectives of the brief. Further develop the ideas into a final design reflecting on the experimentations from batik, tie dye and applique.</p> <p><b>Assessment 2</b></p> <ul style="list-style-type: none"> <li>• Construct a fully functional pencil case, that include plain seams and a fastening. The decoration and design of the final outcome has been reflected on from experimentations and other artists</li> </ul> <p><b>Assessment 3</b></p> <ul style="list-style-type: none"> <li>• Evaluate the quality of your manufacture, making suggestions of how it can be improved.</li> </ul>	<p>understanding of purpose, form &amp; function.</p> <p><b>Assessment 2</b></p> <ul style="list-style-type: none"> <li>• To clarify ideas through sketching discussion and evaluation.</li> <li>• To use your research and opinions of others to make informed decisions.</li> </ul> <p>To improve communication skills.</p> <p><b>Assessment 3</b></p> <ul style="list-style-type: none"> <li>• To understand how to create a clock from acrylic</li> <li>• To be able to work with some precision and to pay attention to function &amp; quality of finish.</li> </ul>	<p>diagram using the tools you deem appropriate.</p> <p><b>Assessment 2</b></p> <p>Design a ruler that can aid your learning in all your lessons and enable you to improve your presentation skills.</p> <p><b>Assessment 3</b></p> <p>Export your design to the laser cutter and add a post-production finish</p>
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