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Principal: Mrs C Stanyer

Subject: Design & Technology

Year 9

Curriculum Map 2024 - 25




Week Commencing	Rotation 1 – Engineering Rotation 2 – Textiles Design Rotation 3 – Food & Nutrition	Week Commencing
Rotations may vary see class list on last page		
Rotation 1 – Engineering Staff INSET 02/09 Students Return 03/09 	Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.	Students marked on 10 'I can' Statements linking to practical, theory and independent learning for the subject rotation throughout the 13 weeks.
09/09/2024 	Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.	
16/09/2024 	Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.	
23/09/2024 	Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.	
30/09/2024	Students are required to independently evaluate their final practical outcomes against the original specification.	



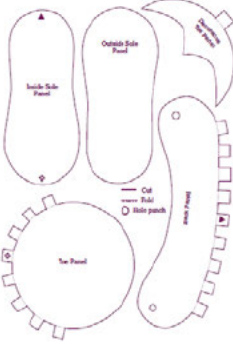

Ormiston Meridian Academy is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment.





<p>Developed Ideas</p> <p>I can:</p> <ul style="list-style-type: none"> Show clear understanding of the how you need set clear guidelines of what your product should do. Identify how you could attract your target market into purchasing your design/prototype. Recognise the quality required when developing work within Product Design. <p>Keywords: Aesthetics, design, render, sketch, focus, develop, enhance, improve</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>		
<p>07/10/2024</p> <p>Thursday, 9 November 2021</p> <p>What drawing style is this?</p> <p>Thinking back to year 7 & 8, what is the name of this 3D drawing style? (What are the specific rules of this drawing style?)</p> <p>Using a sharp pencil and a ruler carefully join up the dots to form the image.</p> <p>Remember that there are no horizontal lines!</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	
<p>14/10/2024</p> <p>Cardboard Prototyping</p> <p>I can:</p> <ul style="list-style-type: none"> Develop a prototype that shows creativity and a development of ideas. Identify how your prototype links to your original design brief as well as fulfilling the needs of your target market. Recognise the quality required when developing work within Product Design. <p>Keywords: Prototype, Evaluate, Specification, Development, User</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	
<p>21/10/2024</p> <p>Working Prototyping (practical)</p> <p>I can:</p> <ul style="list-style-type: none"> Develop a working prototype that shows creativity and a development of ideas. Identify how your working prototype links to your original design brief as well as fulfilling the needs of your target market. Recognise the quality required when developing work within Product Design. <p>Keywords: Standards, Design, Technical, Information, Dimension</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	
<p>October Half Term</p>		
<p>04/11/2024</p> <p>Working Prototyping (practical)</p> <p>I can:</p> <ul style="list-style-type: none"> Develop a working prototype that shows creativity and a development of ideas. Identify how your working prototype links to your original design brief as well as fulfilling the needs of your target market. Recognise the quality required when developing work within Product Design. <p>Keywords: Standards, Design, Technical, Information, Dimension</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	
<p>11/11/2024</p> <p>Working Prototyping (practical)</p> <p>I can:</p> <ul style="list-style-type: none"> Develop a working prototype that shows creativity and a development of ideas. Identify how your working prototype links to your original design brief as well as fulfilling the needs of your target market. Recognise the quality required when developing work within Product Design. <p>Keywords: Standards, Design, Technical, Information, Dimension</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	<p>Achievement Round 1</p>
<p>18/11/2024</p> <p>Working Prototyping (practical)</p> <p>I can:</p> <ul style="list-style-type: none"> Develop a working prototype that shows creativity and a development of ideas. Identify how your working prototype links to your original design brief as well as fulfilling the needs of your target market. Recognise the quality required when developing work within Product Design. <p>Keywords: Standards, Design, Technical, Information, Dimension</p> <p>Shaping Lives Building Ambition Inspiring Futures [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	<p>Achievement Round 1</p>

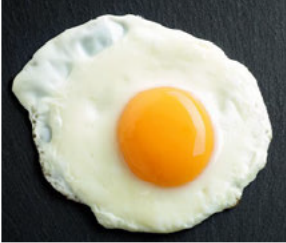



<p>25/11/2024</p>  <p>Working Prototyping (practical) I can: Develop a working prototype that shows creativity and a development of ideas. Identify how your working prototype links to your original design brief as well as fulfilling the needs of your target market. Recognise the quality required when developing work within Product Design. Keywords: Standards, Design, Technical, Information, Dimensional [OAT]</p>	<p>Students will develop their practical skills by creating a working prototype using marine ply. This is designed to develop student's independent practical skills. Students are to identify and use appropriate working skills.</p>	
<p>02/12/2024</p>  <p>Product Evaluation I can: Develop a clear understanding of the need to evaluate products to ensure that they develop over time. Identify how you could attract your target market into purchasing your design/prototype. Recognise the quality required when developing work within Product Design. Keywords: Evaluate, User, Outcome, Specification, Innovation [OAT]</p>	<p>Students are required to independently evaluate their final practical outcomes against the original specification.</p>	
<p>Rotation 2 – Textiles Design</p> <p>09/12/2024</p>  <p>Design brief Friday, 08 September 2023 Paper can be used as a surface on which to create textile work or as an element within textiles. Artist Jenifer Collier creates household items from found & recycled papers, giving new life to items that would otherwise be thrown away. Using the tagline 'I am my own inspiration' create a shoe using your own self inspired decorative paper. [OAT]</p>	<p>'Step into my shoes' project – Students will; create their own self inspired decorative paper shoe combining paper and stitch; explore the work of a relevant textiles artist; experiment with a range of techniques as well as designing a pattern using the tag line 'I am my own inspiration.'</p> <p>Lesson 1 – Introduction to the Design Brief Students explore the project brief and record initial thoughts in response to the brief.</p> <p>Key words: translate - <i>convert something or be converted into (another form or medium)</i> inspiration - <i>the process of being mentally motivated to do or feel something, especially to do something creative</i> personality - <i>the combination of characteristics or qualities that form an individual's distinctive character</i></p>	<p>Students marked on 10 'I can' Statements linking to practical, theory and independent learning for the subject rotation throughout the 13 weeks.</p>
<p>16/12/2024</p>	<p>Lesson 2 – Artist research Students will engage in a series of activities to develop their awareness of the artist Jenifer Collier.</p> <p><i>Craft Journeys - Paper & Stitch - Jennifer Collier -</i> https://www.youtube.com/watch?v=lpLqSWj9IM</p> <p>Key words: research - <i>to study in detail, discover and find information about</i> analyse - <i>examine something carefully and in detail, usually to explain and interpret it</i> subjective - <i>based on or influenced by personal feelings, tastes, or opinions</i> objective - <i>(judgement) not influenced by personal feelings or opinions in considering and representing facts</i></p>	
<p>Christmas Break</p>		
<p>06/01/2025</p>	<p>Lesson 3 – Exploring the Work of an Artist Students continue to develop their awareness of the work of Jenifer Collier by creating a prototype paper shoe from a Collier template.</p> <p>Key words: research - <i>to study in detail, discover and find information about</i> analyse - <i>examine something carefully and in detail, usually to explain and interpret it</i> subjective - <i>based on or influenced by personal feelings, tastes, or opinions</i></p>	

	<p>objective - (judgement) not influenced by personal feelings or opinions in considering and representing facts</p>	
<p>13/01/2025</p>	<p>Lesson 4 – Initial Design Ideas Using visual research collected for homework students will produce simple individual designs that represent them and their personalities.</p> <p>Key words: visual communication - the conveyance of ideas and information in forms that can be seen simplify - make (something) simpler or easier to do or understand silhouette - the dark shape and outline of someone or something visible in restricted light against a brighter background outline - a line or set of lines indicating the shape of an object in a sketch or diagram</p>	
<p>20/01/2025</p> 	<p>Lesson 5 – Environmental Issues Students will develop an awareness of the environmental issues surrounding the textiles and fashion industry. They will learn about the 6 R's and how these can be used to reduce the impact to the environment.</p> <p>The problem with fast fashion - https://www.youtube.com/watch?v=iq0--DfC2Xk https://www.independent.co.uk/life-style/fashion/environment-costs-fast-fashion-pollution-waste-sustainability-a8139386.html?amp</p> <p>Key words: fast fashion - inexpensive clothing produced rapidly by mass-market retailers in response to the latest trends sustainable - preserving an ecological (natural) balance by avoiding depletion (reduction) of natural resources pollution - the presence in or introduction into the environment of a substance which has harmful or poisonous effects</p>	
<p>27/01/2025</p> 	<p>Lessons 6 & 7– Pattern Designs Students will learn how to turn their initial design ideas into a pattern.</p> <p>Composition in art – https://www.youtube.com/watch?v=VwUZ3PivD6I</p> <p>Key words: focal – relating to the centre or most <i>important part</i> aesthetically pleasing - to call something aesthetically pleasing is in essence to call it beautiful, i.e. pleasing to the senses, but particularly the senses of sight and hearing composition - the way in which something is put together or arranged</p>	
<p>03/02/2025</p>	<p>Lessons 6 & 7– Pattern Designs Students will learn how to turn their initial design ideas into a pattern.</p> <p>Composition in art – https://www.youtube.com/watch?v=VwUZ3PivD6I</p> <p>Key words: focal – relating to the centre or most <i>important part</i></p>	

	<p>aesthetically pleasing - to call something aesthetically pleasing is in essence to call it beautiful, i.e. pleasing to the senses, but particularly the senses of sight and hearing</p> <p>composition - the way in which something is put together or arranged</p>	
<p>10/02/2025</p> 	<p>Lessons 8 – Sampling and Exploring Techniques Continued</p> <p>Students will be introduced to a range of techniques and be given the opportunity to sample these techniques, demonstrating control of media. Students will evaluate the suitability of the techniques for their final outcome.</p> <p>Key words:</p> <p>weaving – the craft or action of forming fabric by interlacing threads</p> <p>quilling – a type of decorative craftwork involving the shaping of paper, fabric, or glass into delicate pleats or folds</p> <p>origami – the Japanese art of folding paper into decorative shapes and figures</p>	
<p>February Half Term</p>		
<p>24/02/2025</p> 	<p>Lesson 9 – Developing Colourways</p> <p>Students will use colour theory knowledge to develop different colourway options for their final pattern design and evaluate their effectiveness.</p> <p>Key words:</p> <p>colourway - any of a range of combinations of colours in which a style or design is available</p> <p>enhance - intensify, increase, or further improve the quality, value, or extent of</p>	
<p>03/03/2025</p> 	<p>Lessons 10 – Shoe Designs</p> <p>Students will develop their shoe design; deciding on their chosen style of shoe; how they may incorporate the previous learnt techniques into the design and where to position their self-inspired decorative patterned paper.</p> <p>Students will annotate their design idea to further communicate their design.</p> <p>Key words:</p> <p>annotation - a note by way of explanation or comment added to a text or diagram</p> <p>evaluate - reflect on something (your designs) and make judgements about its effectiveness or success</p>	<p>Achievement Round 2</p>
<p>10/03/2025</p> 	<p>Lessons 11 & 12 – Making</p> <p>Students will produce a final outcome presenting a personal and meaningful response to a brief.</p>	<p>Achievement Round 2</p>

<p>17/03/2025</p> 	<p>Lesson 11 & 12 – Making (continued) Students will produce a final outcome presenting a personal and meaningful response to a brief.</p>	
<p>24/03/2023</p>	<p>Lesson 13 – Final Evaluation & Critical Reflection Evaluation of practical outcome – students will evaluate their final outcome, identify the strengths and weaknesses of their project and discuss improvements that could be made. Class teacher will review 'I can' assessment spreadsheet and wave 1 and 2 improvements will be identified and retaught.</p>	
<p>Rotation 3 – Food & Nutrition 31/03/2025</p>	<p>Lesson 1 - Causes of Food Related Ill Health Students will learn the main causes of food related ill health, they will recall knowledge of coloured chopping boards and explain how the prevent illness. They will be able to identify symptoms of food poisoning and explain what and allergy is. Key words: danger Zone - temperature range of 5-63°C in which bacteria grows rapidly binary Fission - how bacteria reproduce and multiply</p>	<p>Students marked on 10 'I can' Statements linking to practical, theory and independent learning for the subject rotation throughout the 13 weeks.</p>
<p>07/04/2025</p> 	<p>Lesson 2 - Garlic Bread Pizza Demonstration Students will be shown how to make a garlic bread pizza with a homemade base. Students will complete a practical planning sheet that will include a list of ingredients, equipment and all the necessary steps to produce their own garlic bread pizza. Key words: fermentation (in bread) - during fermentation, carbon dioxide is produced and trapped as tiny pockets of air within the dough. This causes it to rise. During baking the carbon dioxide expands and causes the bread to rise further. The alcohol produced during fermentation evaporates during the bread baking process gluten – a mixture of two proteins present in cereal grains, especially wheat, which is responsible for the elastic texture of dough knead – work moistened flour into dough or with the hands</p>	
<p>Easter Break</p>		
<p>28/04/2025</p>	<p>Lesson 3 - Garlic Bread Pizza Students will work safely and hygienically to produce their own garlic bread. Through this practical session they will develop skills in the following areas: accurate weighing and measuring, kneading, shaping, cutting methods and using the oven safely.</p>	
<p>05/05/25</p>	<p>Lesson 4 – Nutritional Needs of Different People and Unsatisfactory Nutritional Intake Students will show an understanding of the nutritional needs of different people. They will describe ways in which unsatisfactory nutritional intake can affect the body and identify a range of vitamins and nutrients the body needs. Key words: life stages – stages of development that people go through during their life: i.e. infancy (babyhood), childhood, adolescence, adulthood and later adulthood deficiency – a lack or shortage excess – an amount of something that is more than necessary</p>	

<p>12/05/2025</p> 	<p>Lesson 5 – Short Crust Pastry Demonstration and Practical</p> <p>Students will work safely and hygienically to produce their own short crust pastry sausage rolls. Through this practical session they will develop skills in the following areas: accurate weighing and measuring, rubbing in method, shaping, cutting methods and using the oven safely.</p> <p>Key words:</p> <p>Shortening – Short crust pastry - using fats to shorten a mixture. Butter, lard, margarine etc.</p>	
<p>19/05/2025</p> 	<p>Lesson 6 – Where Does Food Come From?</p> <p>Students will understand where food comes from and be able to identify whether a food has been caught, reared, grown or processed. They will also be able to explain the difference between raw and processed food.</p> <p>Key words:</p> <p>origins - <i>the point or place where something begins, arises, or is derived</i></p> <p>reared - <i>bred and raised (animals).</i> <i>"the calves are reared for beef"</i></p> <p>process - <i>perform a series of mechanical or chemical operations on (something) in order to change or preserve it</i></p>	
<p>May Half Term</p>		
<p>02/06/2025</p> 	<p>Lesson 7 – Chocolate Brownie Demonstration and Practical</p> <p>Students will work safely and hygienically to produce their own chocolate brownies. Through this practical session they will develop skills in the following areas: accurate weighing and measuring, use of an electric whisk, setting up and using a bain-marie safely, folding in flour and using the oven safely.</p>	
<p>09/06/2025</p> 	<p>Lesson 8 – Seasonal Food</p> <p>Students will learn about the benefits of using seasonal food in their cooking, why sourcing locally and supporting local businesses is an important factor in reducing food miles.</p> <p>Key words:</p> <p>seasonal foods - seasonality of food refers to the times of year when the harvest or the flavour of a given type food is at its peak. This is usually the time when the item is the cheapest and the freshest on the market. The food's peak harvest time usually coincides with when its flavour is at its best.</p> <p>climate - <i>the weather conditions prevailing in an area in general or over a long period</i></p>	
<p>16/06/2025</p> 	<p>Lesson 9 – Cheese Sauce (roux method) Demonstration and Practical</p> <p>Students will work safely and hygienically to produce their own cheese sauce. Through this practical session they will develop skills in the following areas: accurate weighing and measuring, making a roux, grating, whisking, and the process of gelatinisation.</p>	<p>Achievement Round 3</p>

<p>23/06/2025</p> 	<p>Lesson 10 – How cooking methods affect nutrients in food Students will be able to explain different methods of cooking food, suggest ingredients they can be used for, and examine how the sensory properties and nutrition of food changes when cooked using different methods.</p> <p>Key words: coagulated – the heat causes lots of denatured proteins to join together and change the appearance and texture of the food, e.g. when an egg is cooked. denatured – the heat has caused protein to change its chemical nature</p>	<p>Achievement Round 3</p>
<p>30/06/2025</p> 	<p>Lesson 11 – Meatballs and Ragu Sauce Demonstration and Practical.</p> <p>Students will work safely and hygienically to produce their own meatballs in Ragu sauce. Through this practical session they will develop skills in the following areas: dovetailing recipes, working with high risk foods, cutting methods (bridge and claw), shaping, frying, and simmering.</p>	<p>Achievement Round 3</p>
<p>07/07/2025</p> 	<p>Lesson 12 – Environmental Factors</p> <p>Students will learn about how climate change is affecting food production, the 3 Rs and sustainable food production. They will be able to show an understanding of the various different ways in which food productions can affect the environment, identify food that has the highest and lowest carbon footprint and examine why businesses are encouraged to Reduce, Reuse and Recycle the waste they create.</p> <p>Key words: climate change – changes in the Earth's temperature that can lead to unusual and extreme weather conditions. carbon footprint – a measure of how food production contributes towards the production of greenhouse gases. sustainability – producing food in a way that can be maintained over a long period of time and protects the environment.</p>	
<p>14/07/2025</p> 	<p>Lesson 13 – Swiss Roll Demonstration and Practical</p> <p>Students will work safely and hygienically to produce their own Swiss roll. Through this practical session they will develop skills in the following areas: accurate weighing and measuring, use of an electric whisk, folding in flour, using the oven safely and with precise timing, and finishing skills.</p>	

Rotation 1	Rotation 2	Rotation 3
901/DT FD	906/DT FD	903/DT FD
902/DT ENGR	901/DT ENGR	906/DT ENGR
903/DT TX	902/DT TX	905/DT TX
904/DT ENGR	905/DT ENGR	904/DT TX
905/DT FD	904/DT FD	902/DT FD
906/DT TX	903/DT ENGR	901/DT TX

Rotation 1	Rotation 2	Rotation 3
9M1/DT FD	9M3/DT FD	9M2/DT FD
9M2/DT ENGR	9M1/DT ENGR	9M3/DT ENGR
9M3/DT TX	9M2/DT TX	9M4/DT TX
9M4/DT ENGR	9M5/DT ENGR	9M1/DT TX
9M5/DT FD	9M4/DT FD	9M5/DT TX