

To develop a scholar's love and appreciation of design & technology. Scholars will gain an understanding of the world around them by looking at what has been expressed by others before them. Scholars will work with stimulating contexts that provide a range of practical and intellectual opportunities and draw on the local community and wider world. Scholars will develop confidence in using practical skills and become educated users of products, who can apply their problem solving, creative thinking and innovation skills in a variety of situations. They will have the opportunity to work with a range of materials, subject specific areas and disciplines. Each year, scholars will develop a greater subject knowledge, with increasing challenging added each year.

September 2022 – July 2023							
Year	Project 1	Project 2	Project 3	Project 4	Project 5		What will a successful scholar look like at this stage?
7	<ul style="list-style-type: none"> ** Aesthetic design ** Investigating patterns and shapes using card in graphics 	<ul style="list-style-type: none"> ** 2D design ** Creating a 2D pattern trainer design based on and artist 	<ul style="list-style-type: none"> ** 3D design ** 3D card trainer production informed by the 2d design 	<ul style="list-style-type: none"> ** Modern design ** Cardboard modernist phone holder / speaker amplifier 	<ul style="list-style-type: none"> ** Food and nutrition ** Introduction to healthy eating 		<p>Throughout Y7, scholars will develop their dexterity. Scholars will be able to turn a 2D drawing into a 3D models. Scholars will understand the basic principles of food preparation, hygiene and healthy eating.</p>
8	<ul style="list-style-type: none"> ** Name plate street art project 	<ul style="list-style-type: none"> ** Streamlining toy car project 	<ul style="list-style-type: none"> ** T-Light holder project 	<ul style="list-style-type: none"> ** Promotional packaging and graphic design 	<ul style="list-style-type: none"> ** Food and nutrition ** Advanced cooking techniques and healthy eating 		<p>In Y8, scholars will learn how to use workshop tools and templates to produce their 3D functional designs. Scholars will understand how to undertake advanced food production skills and how nutrients effect the body. Scholars will also be aware of seasonal availability and different diet requirements.</p>
9	<ul style="list-style-type: none"> ** Pewter casting natural forms project 	<ul style="list-style-type: none"> ** Designer based phone holder project 	<ul style="list-style-type: none"> ** Upcycled robot project 	<ul style="list-style-type: none"> ** Mechanical functions and design challenge 	<ul style="list-style-type: none"> ** Food and nutrition ** Developing a healthy food product for a user 		<p>Scholars in Y9 will be able to adapt suggested production plans to suit their own designs; they will be more independent creators. Scholars will work with a greater range of 3D techniques and materials, as well as having complete design control. Scholars will be able to select an intended user and develop a product that will suit their needs.</p>
10 3D Design	<ul style="list-style-type: none"> ** Charles Rennie Mackintosh based jewellery design 	<ul style="list-style-type: none"> ** Charles Rennie Mackintosh based scale model furniture designs 	<ul style="list-style-type: none"> ** Investigating the work of other designers and artists 	<ul style="list-style-type: none"> ** Repeat pattern design based of a chosen designer, to produce acrylic product 	<ul style="list-style-type: none"> ** Architectural drawing and modelling based on the chosen designer 	<ul style="list-style-type: none"> ** Mini design project with scholars selecting their own source materials and production methods to produce a 3D product of their choice 	<p>In 3D Design, scholars will be refining their workshop skills in order to produce a higher quality of outcome. They will complete coursework throughout this year showcasing the independent creative and technical skills that they have mastered throughout KS3.</p>
10 Food and Nutrition	<ul style="list-style-type: none"> ** Macronutrients – carbs and proteins. Food Science relating to protein and carbohydrates. Basic practical skills introduced. 	<ul style="list-style-type: none"> ** Macronutrients – fats. Food science relating to bread baking and pastry making. Medium practical skills introduced. Emphasis on presentation skills 	<ul style="list-style-type: none"> ** Micronutrients – vitamins and minerals. Food science relating to how vitamins and minerals are lost during cooking, preparing and storing food items. Dietary needs of different life stages. Higher practical skills introduced, 	<ul style="list-style-type: none"> ** Special dietary needs including vegetarians, coeliac, lactose intolerance etc. Factors affecting food choice. 	<ul style="list-style-type: none"> ** The BIG 6 – looking at tooth decay, obesity etc. PAL / ENERGY. Higher practical skills continued 	<ul style="list-style-type: none"> ** Microorganisms. Raising agents. The functional properties of fat – in preparation of the NEA1 (Non Exam Assessment) 	<p>Food and Nutrition gives scholars the knowledge, understanding and skills required to cook and apply the principles of food science, nutrition and healthy eating.</p>

<p>11 3D Design</p>	<ul style="list-style-type: none"> * Assessed GCSE coursework starts. This begins with Drawing, research, experimentation and developing their theme. 	<ul style="list-style-type: none"> * The independent GCSE coursework continues with scholars developing their ideas and producing a final piece. * The portfolio of work and final 3D piece is submitted for marking and forms 60% of their GCSE marks 	<ul style="list-style-type: none"> * An externally set assignment is given forming 40% of the GCSE grade. Assessed coursework for the assignment begins with Drawing, research, experimentation, developing their theme and a final piece plan 	<ul style="list-style-type: none"> * Final Exam and submission of the supporting coursework and final exam piece. 	<ul style="list-style-type: none"> * The end of the 3D Design GCSE. Scholars engage in independent study, they can select revision materials for subjects of their choosing 	<ul style="list-style-type: none"> * Scholars engage in independent study, they can select revision materials for subjects of their choosing 	<p>Scholars use the skills they have acquired in KS3 and KS4 to produced assessed preparation, development and final design work.</p>
<p>11 Food and Nutrition</p>	<ul style="list-style-type: none"> * Completion of microorganisms * Start of NEAs (Non Exam Assessments) making 50% Of the GCSE marks. <ul style="list-style-type: none"> • NEA 1 – food Science investigation 	<ul style="list-style-type: none"> * NEA1 – Food Science investigation * Practical investigations are a compulsory element of this * NEA task 	<ul style="list-style-type: none"> * NEA 2 – Food Preparation assessment * Scholars will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved. 	<ul style="list-style-type: none"> * NEA 2 – Food Preparation assessment 	<ul style="list-style-type: none"> * Food provenance 	<ul style="list-style-type: none"> * Revision for the end of year written exam. 50% of the GCSE marks. 	<p>Scholars demonstrate their understanding of the working characteristics, functional and chemical properties of ingredients. As well as the skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition.</p>