

DESIGN TECHNOLOGY-FOOD PREPARATION & NUTRITION-ART & DESIGN: TEXTILES

In key stage 3 students are introduced to a number of new experiences in a range of subject areas that are not covered in depth at key stage 2. Music, Art (Fine and Textile), Food Preparation and Nutrition and Design and Technology allow students to engage with and develop knowledge and skills in the creative subjects within the school curriculum. Students will learn about health and safety in various environments, enabling them to work safely with a variety of materials/tools/media and instruments when responding to set tasks. They will gain an awareness of different art and design movements, as well as cultural and historical music, to aid their responses. In Food, students will gain an understanding of Food hygiene, the science behind food and nutrition. Learning of key skills are taught explicitly within each project. The curriculum in key stage 3 has been specifically developed to engage students in new subject areas and build knowledge and skills, year on year, in preparation for key stage 4.

Design & Technology Rationale-KS3

To prepare KS3 students in the best possible way for KS4 students create a foundation based on renewable and non-renewable sources. These sources are covered through practical learning during a physical outcome. Students will become competent in using tools and machines to prepare for the making element involved for the GCSE Non-Exam Assessment. All projects in KS3 are planned to entail and prepare them for all 6 stages involved for the NEA and cover theory knowledge required for the GCSE Exam.

Food Preparation and Nutrition Rationale-KS3

In preparation for KS4, in KS3 students will study 3 of the 5 elements of the GCSE course as a foundation for further study. Within the KS3 programme, students will understand and apply the principles of nutrition and health. They will cook a repertoire of 12 predominantly savoury dishes, so that they are able to feed themselves and others a healthy and varied diet. They will become competent in a range of cooking techniques and understand the characteristics of a broad range of ingredients.

They will understand the principles of nutrition and health in relation to energy, nutrients, water and fibre, diet and health and nutritional needs throughout life. The 12 dishes are in line with the principles of The Eatwell guide and use a range of food commodities, e.g. cereals, fruit, vegetables, meat, fish, eggs, fats/oils, milk/dairy food products.

Art & Design-Textile Design Rationale-KS3

In preparation for KS4, in KS3 students will be taught to develop their creativity and ideas, and increase proficiency in their execution. They will be taught to develop a critical understanding of artists, architects and designers, expressing reasoned judgements that can inform their own work. They will be taught to use a range of techniques to record their observations as a basis for exploring their ideas. They will be taught to use a range of techniques and media, to increase their proficiency in the handling of different materials. They will learn to analyse and evaluate their own work, and that of others, in order to strengthen the visual impact or applications of their work. They will also learn about the history of art, craft, design and architecture, including periods, styles and major movements from ancient times up to the present day.

Autumn term: Design & Technology		
Term 1	<p>Maze Game Project Student's are to design and make a maze considering ergonomics and the properties of acrylic. Students will learn where plastic comes from and how it is manufactured, they will also be able to explain thermosetting and thermoplastics and identify which plastic products fall in each category. Students will be able to design, test and manufacture their game and apply all these skills in a practical outcome.</p>	
	<p>Important vocabulary:</p>	
	<ul style="list-style-type: none"> • Design • Function • Data • Resource • Internal • External • Generate • Equipment • Summary • Evaluate 	<ul style="list-style-type: none"> • Ergonomic • Crude oil • Thermosetting plastic • Thermo plastic • Wet and dry paper • Brittle
	<p>Key knowledge students will learn:</p>	<p>Key practical skills students will learn:</p>
	<ul style="list-style-type: none"> • How to work safely in the Resistant Materials workshop when using tools and looking out for other students during a practical lesson. • How to select and use simple hand tools such as: coping saw, junior hacksaw, files and a steel rule • The outline principles of the design process • How to reflect on work during evaluation 	<ul style="list-style-type: none"> • How to construct a specification • How to create and present basic 2-dimensional design sketches • How to develop and test this using card • How to mark, measure, cut and smooth acrylic using hand tools
Spring term: Food Preparation & Nutrition		
Term 2	<p>The packed lunch project During this scheme of work, students will learn about food safety, including food spoilage and contamination. Microorganisms and enzymes, including microorganisms in food production and bacterial contamination. We will also look at the principles of food safety in relation to preparing, cooking and serving food.</p>	
	<p>Important vocabulary:</p>	
	Campylobacter Escherichia coli (E. coli) Salmonella Listeria Staphylococcus aureus Bacteria Safety Hygiene	Poisoning Diseases Contaminate Vegetables Weigh Contamination Hazard
	<p>Key knowledge students will learn:</p>	<p>Key practical skills students will learn:</p>
	<ul style="list-style-type: none"> • The four 'C's' • Food safety and microorganisms Campylobacter-Escherichia coli (E. coli)-Salmonella-Listeria-Staphylococcus aureus-MRSA <ul style="list-style-type: none"> • The Use of Microorganisms in Food Production Aspergillus-Lactobacillus Bulgaricus-Penicillin-Saccharomyces cerevisiae <ul style="list-style-type: none"> • Function of ingredients • The Eatwell Guide • Macro and Micro nutrients • Food Safety and Temperature Controls • Knife skills 	Skill 1: General practical skills Skill 2: Knife skills Skill 3:Preparing fruit and vegetables Skill 4: Use of the cooker Skill 5: Use of equipment Skill 7: Prepare, combine and shape Skill 9: Tenderise and marinate Skill 10: Dough Skill 11: Raising agents

	Summer term: Art & Design-Textiles	
Term 3	The shapes project During this scheme of work, students will learn about various art movements from the 1870's-1960's. Students will be taught to develop their creativity and ideas using these artists/art movements as a starting point for their own designs, based on Abstract art. Students will use this work as a foundation to further explore and develop ideas from, using bonded and woven fabrics, making a planner cover, which will be their final piece. This unit is designed to enable pupils to develop a critical understanding of abstract artists and the associated design movements.	
	Important vocabulary:	
	Analyse Interpret Research Designs Evaluate Sequence Symbols Incorporate Random Assembled	Embroidery Applique Thread Symbolist Needle Fray Fibre Loom Bolt Felt
	Key knowledge students will learn:	Key practical skills students will learn:
	<ul style="list-style-type: none"> • Health & Safety in the Textiles room • Art movement from 1870-1960 • Messages and meanings in a number famous art works • Perspective drawing (AO3) • Colour theory • How to develop ideas through investigations, demonstrating critical understanding of sources, researching a specific artist (AO1) • Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes, creating initial design ideas (AO2) 	<ul style="list-style-type: none"> • How to photograph buildings in various perspectives • How to draw various shapes in varying perspectives • How to mix and apply colour • How to use technology to research and produce artist response sheets • How to control various media to respond to an artist's works. • How to control various tools, including fabric shears, pins, hand embroidery needles and sewing machines, to produce the required results • How to produce a variety of hand embroidery stitches • How to create and manufacture a product from 2D materials to a 3D finished product

How can I help my child be successful?

-  Support your child when undertaking homework research tasks
-  Use the grade descriptors at the front of the work booklets to ensure quality in work produced
-  Enable your child to complete tasks successfully, by ensuring they have the resources required or communicating with teachers for further support
-  Explore the key vocabulary often with your child to help them transfer it to long term memory
-  Encouraging your child to be organised and plan ahead to ensure smooth progress through the rotation
-  Practise tricky spellings together.

How will you assess my child's progress?

Assessment of learning takes many forms. We assess how your child is learning through their written, visual, practical and verbal responses.

In the creative arts we value the importance of providing students with feedback that enables them to progress. We therefore provide formative feedback that requires a response from our students, through a number of comparative marking sessions. All formative assessment is logged by students as a reference point for continual improvement. Lower attaining work will be required to be improved, using the logged feedback, to ensure individual progress. Written corrections require students to work in green pen, to highlight errors. They are then able to reflect clearly on where they have made progress.

Students appreciate the importance of the comparative marking sessions. We give feedback on work regularly, to enable students to track their progress in various disciplines, whether it be a research, design or practical tasks.

Each rotational subject will allow for students to produce one or a number of practical outcomes, based on sound research and design work. The projects are marked summatively at the end of each rotation to provide a 'snap shot' of the knowledge and skills the students have gained and those which still require work. This is used, along with their classwork and feedback, to inform the reports you receive home.