

St Cuthbert Mayne School Curriculum Map 2023-2024



Department: Design & Technology

Year 7

Design and Technology - KS3

● Design and Technology is an inspiring, rigorous, engaging and practical subject. Using creativity and imagination, students design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire and use a broad range of subject knowledge, skills, and understanding to prepare them to live and work in the designed and made world. They incorporate knowledge and understanding of different materials and manufacturing processes in order to design and make, with confidence and demonstrate safe working practices. They learn how to take design risks, helping them to become resourceful, innovative and enterprising citizens, and develop the skills to critique and refine their own ideas whilst designing and making. They communicate their design ideas and decisions using different media and techniques and develop decision making skills, including the planning and organisation of time and resources when managing their work. They are encouraged to consider the costs, commercial viability and marketing of products. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. It provides opportunities for students to apply knowledge from other disciplines, including mathematics, science, art & design, computing & humanities. High quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Food Preparation, Cooking and Nutrition - KS3

- Food preparation, cooking and nutrition is an inspiring, rigorous and engaging practical subject where students use a broad range of knowledge, skills, and understanding when buying, storing, preparing and cooking different ingredients to make healthy and nutritious dishes and meals. Students experience exciting and creative lessons which focus on practical cooking skills to ensure students develop a thorough understanding of Nutrition and health, Food science, Food safety, Food choice, Food provenance and the working characteristics of food materials/ingredients. The focus is on nurturing students' practical cooking skills and encourages them to demonstrate effective and safe cooking skills by planning, preparing and cooking using a variety of food commodities, cooking / techniques and equipment. They acquire a knowledge and understanding of the relationship between diet, nutrition and health, including the physiological and psychological effects of poor diet and health and the economic, environmental, ethical, and socio-cultural influences on food availability, production processes, and diet and health choices. They demonstrate knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing, cooking and serving food. They are provided with the opportunity to understand and explore a range of ingredients and processes from different culinary traditions (traditional British and international), to inspire new ideas or modify existing recipes.

Key Stage 3 Curriculum Summary

St Cuthbert Mayne Design & Technology Department follows the Key Stage 3 National Curriculum. At KS3 all students in Year 7, 8 & 9 study Design and Technology and it is delivered through enjoyable, accessible and challenging lessons for all students using a rotating carousel system. Each D&T group has one double lesson (1 hour 50 mins). Every term, after completing each Unit, the students move to a new material area and specialist classroom with a specialist teacher. Students design and make products developing their design skills through researching, analysing and evaluating and sketching. They develop their practical skills by using a wide variety of processes, tools and equipment, working safely and hygienically. They are given opportunities to work independently, in pairs and in teams. They have a context and design brief to follow in all units of work. Future job opportunities and careers are promoted throughout KS3 D&T lessons and activities. All lessons include Social, Moral, Spiritual, Cultural issues and identify the importance and relevance of British Values in the UK.

Students study 3 Units in the following material areas:

1. Graphics
2. Food (Cooking & Nutrition)
3. Resistant Materials - Wood and Plastics

Year 7 Units:

Graphics

Context: A chocolate company wants to produce a new chocolate bar. They want the new product to raise awareness of destruction of the rainforests and promote Fairtrade.

Design Brief: Design and make a new chocolate bar wrapper inspired by the Tropical rainforests.

Food

Context: Young children need to develop healthy eating habits and nutritious food choices from an early age. Freshly prepared food in season is the most nutritious and healthy food to serve.

Design Brief: Design and make a variety of food products for young children that are healthy and nutritious. They will include a variety of fruit and vegetables, developing basic skills and techniques in food preparation and cooking.

Resistant Materials

Context: It is always difficult to think of suitable gifts for friends and relatives, whatever the reason, event or celebration. A photo or picture frame can be the ideal gift for almost everyone.

Design Brief: Design and make a frame using wood, suitable for a small picture or photograph. The frame is to be no larger than A5 size and use a sustainable material.

Academic Year Sept 2023 - July 2024

Topic/Unit	Graphics	Food (Cooking & Nutrition)	Resistant Materials - Wood
Knowledge (Content covered)	Health & Safety, Tools & Equipment, Rainforest, Ingredients, Fairtrade, Logos, 3D, Colours, Target Market, Design brief, Analyse, Mood-board, Collage	Design briefs & Specifications, Hazard analysis, Health & Safety, Risk assessment, Tools & Equipment, Food Hygiene, 5 a day, Nutrition, Healthy Eating, Eatwell Guide, Function of ingredients, Methods of cooking	Design briefs & Specifications, Hazard analysis, Health & Safety, Risk assessment, Tools & Equipment, Properties & types of wood, Wood joints, Sustainability, Adhesives,
Skills	Researching, Explaining, Analysing, Designing, Sketching, Planning, Creating, Modelling, Measuring, Planning, Evaluating	Researching, Explaining, Planning, Creating, Weighing, Measuring, Chopping, Boiling, Simmering, Grating, Rubbing in, Baking, Rolling, Cutting, Glazing, Sauce making, Evaluating	Researching, Explaining, Analysing, Designing, Sketching, Creating, Modelling, Measuring, Planning, Mitre Sawing, Sanding, Drilling, Joining, Embellishing, Wood dying, Varnishing, Evaluating
Assessment	Teacher assessment Self assessment Peer assessment Verbal assessment End of unit assessment	Teacher assessment Self assessment Peer assessment Verbal assessment End of unit assessment	Teacher assessment Self assessment Peer assessment Verbal assessment End of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	CAD technician CAD/design engineer, Civil Engineer, Illustrator, App developer, Games designer, Software engineer, Website designer, Digital media	Agricultural engineer, Hotel & Catering jobs Chef/cook, Restaurant staff/manager, Nutritionist, Dietician Food technologist, Food Scientist Food production, Food journalist, Product developer,	Automotive engineer, Mechanical engineer, Furniture designer, Maintenance engineer, Vehicle mechanic, Shopfitter, Carpenter, Builder, Structural engineer, Production controller

