

# St Cuthbert Mayne School Curriculum Map 2023-2024



## Department: Design & Technology

### Year 8

#### 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 cookery 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.

### **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 and 9 study Design and Technology and it is delivered through enjoyable, accessible and challenging lessons for all students using a rotating carousel system. Every 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. They 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 are:

1. Graphics
2. Food (Cooking & Nutrition)
3. Resistant Materials

## Year 8 Units:

### Graphics:

#### Context:

#### Design Brief:

### Food:

**Context:** Family lifestyles are now very busy and sometimes it is difficult for family members to sit down and eat a healthy, nutritious meal together. Convenience foods are sometimes used too frequently, there may be different dietary needs within the family, and a lack of practical cooking skills can be a problem.

**Design Brief:** Design and make a range of healthy and nutritious food meals for different family members, which are suitable for their life stage. The range of recipes will include multi-cultural foods.

### Resistant Materials:

**Context:** A local tourist attraction in Devon is looking for a new addition to the range of quality products it sells in its shop. They think a mechanical toy would be a great seller, especially if it is made using wood, which is a sustainable material.

**Design Brief:** Design and make a mechanical toy using wood, which reflects the tourist attractions concerns about the environment and the importance of using sustainable materials.

## Academic Year September 2023 - July 2024

Topic/Unit	Graphics	Food (Cooking & Nutrition)	Resistant Materials- Wood
<b>Knowledge (Content covered)</b>	Health & Safety, Tools & Equipment, Logos, 3D, Target Market, Design brief, Analyse, Mood-board, Collage, Campaign, Reduce-Reuse-Recycle, Typography, Plastic Pollution, Re-usable, Inspiration, Repeat pattern, Colour Theory, Logo	Design briefs & Specifications, Hazard analysis, Health & Safety, Risk assessment, Tools & Equipment, Food Hygiene, Food Safety Hygiene, Weighing, Measuring, Eat well Guide, Nutrition, Additives, Allergies, Environmental issues.	Design briefs & Specifications, Hazard analysis, Health & Safety, Risk assessment, Tools & Equipment, Properties & types of wood, Natural wood, Manufactured wood, Recycling, Sustainability, Joining techniques, CAD, CAM, Laser cutter, Wood joints, Adhesives, Mechanical systems
<b>Skills</b>	Researching, Explaining, Analysing, Designing, Sketching, Drawing, Creating, Testing, Evaluating	Researching, Explaining, Planning, Weighing & Measuring, Chopping, Veg & meat preparation, Dry Frying, Boiling, Simmering, Grilling, Baking, Evaluating	Researching, Explaining, Analysing, Designing, Sketching, Planning, Measuring, Making & Creating, Sawing, Sanding, Drilling, Embellishing, Varnishing, Gluing, Painting, Evaluating.
<b>Assessment</b>	Teacher assessment Self assessment, Peer assessment Verbal assessment, Testing End of unit assessment	Teacher assessment Self assessment, Peer assessment Verbal assessment, Testing End of unit assessment	Teacher assessment Self assessment, Peer assessment Verbal assessment, Testing End of unit assessment
<b>Gatsby 4 (Linking curriculum learning to careers)</b> <a href="#">GATSBY</a>	Architect, CAD technician, CAD engineer, Design engineer, Illustrator, App developer, Games designer, Website designer, Digital media designer,	Agricultural engineer, Hotel & Catering jobs Chef/cook, Restaurant staff/manager, Nutritionist, Dietician Food technologist, Food scientist, Food production, Food journalist, Product developer,	Automotive engineer, Furniture designer, Mechanical engineer, Maintenance engineer, Vehicle mechanic, Shopfitter, Carpenter,



<a href="#">BENCHMARK 4</a>		Microbiologist,	Builder, Structural engineer, Production controller
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