



SUBJECT: Curriculum Overview

Year 8

12 Week Carousel	Topic studied	What will I learn?	How will I be assessed?
Year 8	Engineering:	• Engineering Drawing (orthographic & isometric,) • Plastics • Metals • CAD/CAM – 2D design/Laser cutter • Design brief/task analysis/product specification • Manufacturing (one off, batch, mass) Production planning • Electronics (Resistors, Ohm's Law) • Problem Solving • Prototyping • Sustainability	• Practical skills (mood lamp project) • Testing and Evaluation • Isometric drawing of an object • Production plan for mood light • Design Sketches • Final functioning machine to solve a problem! • Programming Task

Year 8	Food:	• Gelatinisation of starch in pasta and white sauce. (<i>Food Science</i>) • Gluten and fermentation in bread making. (<i>Food Science</i>) • Industrial bread-making processes. • Bread making with a variety of ingredients and toppings. • Foods from different cultures. (<i>Food Choice and Provenance</i>) • Safe use of equipment and flavour combinations. • A range of cooking methods and practical skills. (<i>Food Science</i>) • Vegetable classification and French vegetable cuts. • Cake-making techniques. • Coagulation of egg proteins and dextrinisation of starch. (<i>Food Science</i>) • Cross-contamination, high-risk foods and food poisoning prevention. (<i>Food Safety</i>) • Blending and using spices. (<i>Food Choice and Provenance</i>)	Practical outcomes: Macaroni Cheese Bread Bread based pizza Evaluation End of topic test. Work sheets on Food Science An end of term test will assess knowledge on the dishes and methods of cookery used along with health and safety and using the equipment correctly. Practical outcomes: Soups Dutch Apple Cake Chili Con Carne Evaluation End of topic test. Work sheets on Food Science An end of term test will assess knowledge on the dishes and methods of cookery used along with health and safety and using the equipment correctly.
Year 8	Design and Technology:	The key skills and knowledge students will gain during these topics? • To demonstrate the ability to effectively analyse a brief using an appropriate range of keywords/terms through a task analysis. • To investigate design companies and look at designers from the present and the past • To develop the ability to discover through researching a range of existing products and inspiration to support the design process.	Designers and Design companies Memphis style desk tidy You will be assessed by the following: • Verbal Feedback • Peer assessment • tasks in booklet • Success criteria in booklet • Two pieces of stamped work for students per half term to respond too – one graded – Research, • Design development on CAD • Final Making and evaluation

		• To demonstrate the understanding of sustainability and the environment and why designers have to take this into consideration • To show understanding of an effective specification using an appropriate range of keywords/terms. • demonstrate understanding of 3D drawing techniques – isometric and orthographic drawing	
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Students rotate around a carousel so that they study each D&T subject for approximately 12 Weeks