

Year 9 Curriculum Overview

Design and Technology

Half Year 1		
Golden Threads: Design, Make (CAD/CAM, Addition/Wastage tools and techniques, Designers, design ideas, Material Sources and origins, Health and Safety, Equipment)	Golden Threads: Design, Make (Drawing, Addition/Wastage tools and techniques, Material Sources and origins, processing, Marking out, Health and Safety, Equipment)	Golden Threads: Design, Make, Evaluate (Prepare and cook commodities, Scientific terms, Health and Safety, Nutrition, Equipment, Evaluation)
Product Design 1 – Workshop Pewter Casting • Who is Zaha Hadid? • How can you design using the style of Zaha Hadid? • How can you create an accurate flat mould, quickly? • How do you cast metal? • Where does metal come from? • What are the categories of metals? • How do you improve the surface finish of a metal product?	Graphics – Card Modelling • How is paper made? • How do you construct a complex exploded view diagram using isometric and the crating technique? • How do you use a craft knife and glue gun safely? • What techniques can you use to strengthen card, and to alter its form? • How can you make a prototype model look realistic?	Food and Nutrition 1 • How do you thicken a sauce? • What is dairy? • How do you thicken a sauce? • How do you aerate an egg? • How do you cook chicken safely? • What are the critical temperatures involved in preparing, cooking, and storing food?

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Half Year 2		
Golden Threads: Design, Make	Golden Threads: Design, Make	Golden Threads: Design, Make, Evaluate
(CAD/CAM, Addition/Wastage tools and techniques, Designers, design ideas)	(Designers and Design Ideas, Material Sources and origins, Marking out, Health and Safety, Equipment)	(Prepare and cook commodities, Scientific terms, Health and Safety, Nutrition, Equipment, Evaluation)
CAD/CAM – 3D Onshape and 3D printer - Why is CAD/CAM a useful tool in the manufacturing industry? - How do you model a basic 3D shape using Onshape? - How do you model a revolved 3D shape using Onshape? - How do you make a virtual 3D shape hollow? - How do you recognise the work of Alessi? - How can you design a product in the style of a well-known designer?	Textiles – Iconic Design - What are Technical Textiles? - What is an iconic design? - What is a template? How does it improve accuracy? - What forces are involved when cutting fabric? - How do you hand stitch and sewing machine stitch fabric securely? - How do you attach fabrics securely together?	Food and Nutrition 2 - How do you aerate a Swiss roll to create its spongy texture? - How do you make a perfect textured shortcrust pastry? - What does the fat do in pastry? - What does the flour do in pastry? - How do you make a perfect textured shortcrust pastry? - How do you form a pasty? Why is it done this way? - What are the uses of different types of pastry?