

Year 8 Curriculum Overview

Design and Technology

Half Year 1		
Golden Threads: Make, Evaluate (Addition/Wastage tools and techniques, Material Sources and origins, processing, Marking out, Health and Safety, Equipment)	Golden Threads: Design, Make Drawing, CAD/CAM, Design ideas	Golden Threads: Design, Make, Evaluate (Prepare and cook commodities, Scientific terms, Health and Safety, Nutrition, Equipment, Evaluation)
Product Design 1 – Workshop USB Light - What are the categories of timbers? - What are manmade timbers? - How do you cut a piece of plywood effectively? - How do you mark out on timber accurately? - How do you cut plywood? - How do you use a pillar drill? - How do you use a disc sander? - How do you solder? (Addition technique)	Graphics - What is an exploded view diagram? - What is the purpose of an exploded view diagram? - How do you construct an isometric exploded view? - What is the isometric crating technique? - How can you use crating to construct a cylinder? - How do you render shapes to make them look 3D? - How can you show a material using rendering?	Food and Nutrition 1 - How do you operate a hob and oven safely? - What is the melting method? What is it used for? - How do you cook red meat so that it is safe to eat? - How does bacteria multiply? How can you prevent this? - How do you activate the ingredients in dough to make a successful bread? - Can you explain the science behind breadmaking?

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How can you improve a surface finish?	- What is typography? - How can we use CAD/CAM in Graphics?	
Half Year 2		
Golden Threads: Design, Make, Evaluate (Drawing, CAD/CAM, Addition/Wastage tools and techniques, design ideas, Marking out, Equipment, Evaluation)	Golden Threads: Design, Make (Drawing, Addition/Wastage tools and techniques, Designers and Design Ideas, Material Sources and origins, Health and Safety, Equipment)	Golden Threads: Design, Make, Evaluate (Prepare and cook commodities, Scientific terms, Health and Safety, Nutrition, Equipment, Evaluation)
CAD/CAM – 2D Designs and Laser cutter - What do the terms CAD and CAM mean? - What are the advantages and disadvantages of CAD/CAM? - How do you draw basic shapes using 2D CAD?	Textiles – Dye Sublimated stuffed toy - What are textiles important? - What does the term 'synthetic' textiles mean? - Where do synthetic textiles come from? - How can you recognise the work of others?	Food and Nutrition 2 - How do you make bread dough? - How do you cut foods safely and effectively? - How do you use the oven safely? - What are food miles? How can we reduce them?

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• How do you accurately trace and adjust nodes using 2D Design Tools? • How do you specify exact measurements in 2D Design Tools? • How do you prepare a CAD file for it to be manufactured using CAM?	• How can you design in the style of a designer? • What is dye sublimation? • How does dye sublimation work? • How do you pin fabric effectively? • How do you use a ladder stitch to close a gap?	• What is food waste? How can we limit it? • How can you make a smooth and effective batter? • How do raising agents work? • What is coagulation?
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