		De	sign & Technology C	urriculur	Man 2022.	2023			
	Timbers	De		ood & Nutriti		2025	Promotion: 3D printing	g and packaging	
	Working to a design brief and specification		Health and safety: bacteria, the 4 C's and the danger zone				Sustainability and the 6 R's		
-	Technical drawing: isometric		Conducting practicals in the kitchen, roles and responsibilities				Plastics v bioplastics: lifecycle analysis		
-	Technical drawing: one point perspective Physical, working and characteristic properties of timbers		Practical: Pasta Salad: knife skills, using the hob, organoleptic needs The Eatwell Guide: recommendations and planning for a healthy diet				Branding: purpose and forms Product analysis		
	Timbers: origins, forms, properties and uses		Practical: Pizza Pinwheels: accurate weighing and measuring, making, kneading and rolling				Writing a design specification		
Year 7	Working from a third angle orthographic drawing Templates, wastage and tesselation		dough, shaping, accurate portioning Macronutrients: carbohydrates			Creating design			
(on	nemplates, wastage and itesselate Measuring and marking out (steel rule and		Practical: Chicken nuggets & wedges: preparation of high risk food, accurate knife skills,				Additive v subtractive Using on shape to create a pro-		
rotation)	Working safely in the workshop (rules,		enrobing, baking				Papers and boards: origins, forms, types, properties and uses		
-	Cutting, drilling and shaping timber (tenon saw, coping saw, pillar drill, chisel etc) Finishing and assembly techniques: filing handsaw glass paper painting gluing		Macronutrients: fat Practical: Chicken curry: adapting recipe for flavour, experimenting with spices, preparation				Blister packaging Using Serif Draw to create sized artwork		
-	Finishing and assembly techniques: filing, bandsaw, glass paper, painting, gluing Testing and evaluating an outcome		of high risk foods, accurate knife skills, reduction of a sauce, simmering				Osing Serif Draw to creat Advantages and disadvanta		
			Macronutrients: protein Vegan and vegetarianism Practical: Spaghetti Bolognese: browning of mince, accurate knife skills, flavouring, simmering, reduction of sauce, using the hob to boil				Product label	,	
-							Vacuum forn	ning	
-									
	Textiles: Sublimation, stencil a	nd stitch	Polymers & Programming				Motion & Med	hanisms	
	Working to a design brief		CAD & CAM: what are they? advantages and disadvantages, uses and roles in industry				Types of motion: linear, rotary, r	eciprocating, oscillating	
_	Product analysis- pattern placement and use of components							What is a mechanism and what are they used for? Categories of levers, their purpose and examples	
-	Writing a design specification Pattern placement		, ,					and commercial uses	
Year 8 (on rotation)	Using CAD to create a surface pattern design and stencil			tools to create a	Cams and followers: their purpose,				
	Sublimation printing- what is it and how is it used commercially?		Properties associated with polymers				The iterative design process: using testing to improve an outcome		
	Physical, working and characteristic properties associated with fibres		Thermoforming and thermosetting polymers - sources, properties and uses				Models v prototypes Engineering an outcome as a team		
	Fibres: lengths, origins, types, properties and uses Using CAD to create a surface pattern design and stencil		What is a circuit and how does one work? Inputs, processes and outputs				Engineering an outcome as a team Final testing and prize giving!		
	Using the heat press to transfer an image		Circuit component symbols				,		
	Applying a stencilled design Embellishing a product with embroidery		Building a circuit that responds to environemntal inputs Programming a microcontroller						
	Safely using a sewing machine to create a commercially viable product		Programming a microcontroller Technical drawing: two point perspective						
	Testing and evaluating an outcome								
	Timbers & CAD *RC		Food & Nutrition *RC				Sustainable Architecture		
	Researching a theme in response to a brief Writing a design specification		Food bourne illness				What is our 'carbon footprint'		
	Writing a design specification Prodcuing a third angle orthographic drawing		Common types of food poisoning Macronutrients recap				How sustainable is the Shuttleworth College building? Sustainability: Renewable v non-renewable energy sources		
	Applying British Standard conventions for drawing		Micronutrients: what are they? why do we need them? where do we find them?				Sustainability in architecture: water harvesting, living walls		
-	Using CAD to design part of a product incorporating etching, cutting and inserts		Careers: key roles in the Hospitality and Catering industry				Biomimicry and biomorphism		
Year 9	Recap: Timber origins, properties and uses Working safely in the workshop (rules, PPE etc)		Food production plans Practical: Cheese and onion pie: Using rubbing in method to create a short crust pastry, using microwave as				Designing for a purpose Roles and responsibilities with architecture and urban design		
(on rotation)	Measuring and cutting within tolerances		a heat transfer to soften onions without using fat. Shaping and rolling				Construction materials		
rotation)	Finishing and assembly techniques: sanding, bandsaw, glass paper, gluing Surface finishes		Practical: Stuffed Chicken Breast (Advanced knife skills: butchering and butterflying chicken breast, create flavourful filling that will complement the chicken. Coating the chicken to				Models and prototypes		
	Surface finishes Adding a component to complete the product		create a mix of textures). Hassleback baby potatoes and roasted vegetables.				Presenting a co	опсерт	
	Testing and evaluating an outcome		Practical: Flavoured and shaped bread rolls (bread dough, use of portioning into same sized						
		buns, shaping dough, kneading, even distribution of filling) Practical: Lasagne (gelatinisation of roux sauce, accurate measuring of milk and flour to make a smooth							
		consistency - accurate knife sk							
					ood production plan)				
		Year 10 2022-2023 AQA GCSE Design & Technology							
		Polymer and CAD skills:							
	Wood working skills: Bird Box	Polymer and CAD skills: Phone holder and storage		Portfolio	Project: Safe and c		ne	NEA	
Practical	Measuring and cutting within tolerances	Phone holder and storage CAD / CAM:		Portfolio	Project: Safe and c	esign possibilities	ne	NEA	
skills	Measuring and cutting within tolerances Wastage Finger, dowel, dovetail joints	Phone holder and storage CAD / CAM: cutting, etching, inserts, operating the laser cutter		Portfolio	Project: Safe and c ifying and investigating do Design brief and spec Generating Idea	esign possibilities ification as	ne	SECTION A:	
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