

Westbourne Academy Curriculum Planning Document Subject: DT Year:7

Timescale	Aut	umn	Spri	ng	Summer			
Prior Learning (from KS2/3)		YR7 unit 1 – core knowledge about the material	KS2 – Some would have covered the basics of electronics. KS3 – Science, they cover electricity.		KS2- Baking KS2- Healthy eating Home- some would have experience of food preparation and cleaning			
Unit Title	1. Core Principles – Timber	2. Specialist Principles – Timber	3. Core Principles – Electronics	4. Core Principles – Polymers	5. Food, Nutrition & Catering – Being Safe & Healthy			
Key knowledge (5-10 points)	1. Identify and understand the terms softwood, hardwood & manufactured board. 2. Know the source 3. Give examples of different timbers 4. Explain the characteristics of different timbers. 5. Identify different wood joints. 6. Know what rendering and annotation means and be able to apply this. 7. Environmental impact.	Identify tools used when working with timber. Explain the function of each tool. Lamination – in timber. Different finishes and the application of these. Understand the different machines that are used and what for.	1. Identify and understand the terms system, inputs, process, outputs and components. 2. Give examples of the different terms above. 3. Understand how circuits work and what powers them. 4. Identify the tools used in the process of soldering. 5. Understand and learn how to solder. 6. Identify and explain the difference between the board types.	1. Identify and understand the terms thermoforming, thermosetting, CAD and CAM. 2. Give examples of the different polymers 3. Explain some of the characteristics of polymers. 4. Identify and understand the different processes used when working with polymers. 5. Identify the different machines when working with polymers. 6. Understanding the process of CAD & CAM. 7. Know the source	1. Identify and understand the terms health, safety and hygiene. 2. Explain good hygiene practises 3. Identify different methods of safe food storage 4. Identify different food groups of the eat well guide 5. Describe their experiences of different cooking methods 6. Experience of handling a variety of commodities	7. Identify reasons for a uniform/dress code 8. Give examples of the legal dress code required in a professional kitchen 9. Identify common food allergens 10. Identify how different cultures influence food choices 11. Describe their experiences of different cooking methods 12. Experience of handling a variety of commodities		
Key skills (optional)	 How the properties affect the choice of material when manufacturing/designing. Marking out a joint using try square and marking gauge. Rendering and annotation. 	Use tools competently and without help (ideally). Manufacturing techniques such as sawing a wood joint and using the machines – scroll saw, belt sander and disc sander. Applying a finish onto timber.	Select components due to their properties. The ability to solder competently and confidently without help (ideally). Use the tools and equipment competently.	Select type pf polymer due to its properties. Be able to use the strip heater and oven competently and effectively. Be able to use CAD effectively – 2D design Model design out of card & improve where necessary.	Use bridge hold and claw grip safely to prepare food Be able to shallow fry and prepare food in batch volumes Be able to shape and form ingredients	Be able to boil and strain foods Be able to shape food consistently with cutters Be able to bake Be able to present dishes to be appealing		
Key terminology	Beech, Oak, Mahogany, Larch, Pine, Spruce, MDF, Plywood and Chipboard, grain, coniferous, deciduous, rendering, annotation, tenon saw, marking gauge, chisel	Lamination, lap joint, scroll saw, belt sander, disc sander, wax, wire wool, varnish, Danish oil, stain, sand paper, grain, end grain, PVA	Input, process, output, component, voltage, solder, soldering iron, de soldering pump wire strippers, wire cutters, breadboard, PCB.	Thermoforming, thermosetting, CAD, CAM, strip heater, polymer forming oven, heat proof gloves, goggles, laser cutter, 2D	Danger, health, hygiene, safety, hazard, risk, bacteria, temperature danger zone, chop, fry, form, browning	Dress code, professional, legal, allergy, intolerance, allergens, boil, bake, shape		



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								design – names of the different polymers.					
Assessment (methods to assess)	•	Peer assessment of the lamination designs. Verbal/whole class feedback on wood joints.	•	End of unit assessment /30	•	End of unit assessment /15	•	End of unit assessment /15	•	Peer assessment of the presentation of pancakes. Verbal/whole class feedback on cooking.	•	End of unit assessment /30	
Links to other units in KS3/4.		Links to core knowledge needed at KS4 Starts preparing them for creating design ideas, rendering and annotating at KS4.	•	Links to specialist knowledge and skills needed at KS4.	•	Links to core knowledge needed at KS4 Links to specialist knowledge at KS4.	•	Links to core knowledge needed at KS4 Links to specialist knowledge at KS4.	•	Links to medium level cooking and presentation skills required for unit 2 Preparing core knowledge of hygiene, safety and healthy meal planning.	•	Links to medium level cooking and presentation skills required for unit 2 Preparing core knowledge of hygiene, safety and healthy meal planning.	