

Timescale	Autumn		Spring		Summer	
Prior Learning (from KS2/3)	KS3 – Cover CAD/CAM in YR7 as well as design ideas.		KS3- cover health, safety & hygiene. Cooking techniques including baking & frying.		KS2 – Some may have covered parts of this such as a simple running stitch.	
Unit Title	1. Core Principles – Metal	2. Specialist Principles – Metal	3. Food, Nutrition & Catering- Healthy 'Fake Out' Food		5. Core Principles – Textiles	6. Specialist Principles - Textiles
Key knowledge (5-10 points)	<ol style="list-style-type: none"> 1. Identify the terms ferrous, non-ferrous and alloys. 2. Known the source 3. Give examples of different metals. 4. Explain the characteristics of different metals. 5. Develop their understanding of CAD/CAM. 6. Develop their skills in creating design ideas through rendering and annotation. 7. Environmental impact. 	<ol style="list-style-type: none"> 1. Identify the tools used when working with metal. 2. Explain the function of each tool 3. Understand the process of casting. 4. Develop an understanding of the different finishes and the application of these. 5. Understand how machines manipulate metal. 	<ol style="list-style-type: none"> 1. Identify and understand the terms health, safety and cross contamination. 2. Explain good practises of hygiene and food storage 3. Explain how best to respond in the event of a pan fire 4. Give examples of different macronutrients 5. Give examples of different micronutrients including vitamins and minerals 6. Describe their experiences of different cooking methods and cuisine types 7. Experience of handling a variety of commodities 	<ol style="list-style-type: none"> 8. Identify different dietary needs 9. Identify and understand seasonality 10. Explain how food miles can impact the environment 11. Explain the role of an Environmental Health Officer (EHO) 12. Describe their experiences of different cooking methods and cuisine types 13. Experience of handling a variety of commodities including seasonal produce 	<ol style="list-style-type: none"> 1. Identify the terms natural, synthetic, blended and mixed, woven and non-woven textiles. 2. Know the sources. 3. Give examples of different textiles. 4. Explain the characteristics of different textiles. 5. Understand the acronym for ACCESS FM and apply this to products. 6. Environmental impact. 	<ol style="list-style-type: none"> 1. Identify the different tools used when stitching. 2. Understand how to thread and use a sewing machine. 3. Understand and apply different decorative techniques for textiles. 4. Identify different stitches that used in textiles and apply these 5. Understand and apply the process of felting.
Key skills (optional)	<ul style="list-style-type: none"> • How the properties effect the choice of material when manufacturing/designing. • Developing their skills in 2D design to create a mould. • Rendering and annotation 	<ul style="list-style-type: none"> • Pewter casting process & preparation of materials prior to this. • Manufacturing techniques such as sawing metal and filing. • Use tools and machines competently and without help (ideally) – pillar drill and buffing wheel. 	<ul style="list-style-type: none"> • Use bridge hold and claw grip safely to prepare food • Be able to breadcrumb and bake • Be able to shape and form ingredients • Be able to stir fry and adapt a recipe for nutritional needs 	<ul style="list-style-type: none"> • Use bridge hold and claw grip safely to prepare food • Be able to dovetail and cook using multiple methods for a timed service • Use piping to provide decoration 	<ul style="list-style-type: none"> • How the properties effect the choice of material when manufacturing/designing. • Rendering and annotation. • Analyse existing products and understand what makes them good/bad and how to improve. 	<ul style="list-style-type: none"> • Be able to use a sewing machine competently and ideally without support. • Manufacturing techniques such as hand stitching and machine stitching. • Decorative techniques such as block printing and tie-dyeing.
Key terminology	<i>Ferrous, non-ferrous, alloys, low carbon steel, high carbon steel, cast iron, aluminium, copper, tin, zinc, brass, pewter, solder, CAD, CAM, laser cutter, mining.</i>	<i>Pewter casting, sawing, acrylic, pewter, mould, junior hacksaw, metal vice, flat file, hammer, nails, emery cloth, buffing wheel, pillar drill, metal polish, galvanising, plastic dip coating.</i>	<i>Health and safety, bacteria, food poisoning, cross-contamination, freezing, storage, fire, Macronutrients , Protein , Carbohydrate, Fat , Vitamins, Minerals, Fat soluble,</i>	<i>Dietary needs, religion, vegan, vegetarian, gluten, lactose , food miles, British cuisine, seasonality, Environmental Health Officer (EHO), inspection,</i>	<i>Natural, synthetic, blended and mixed, woven and non-woven, aesthetics, cost, customer, environment, safety, size, function, silk, cotton, wool,</i>	<i>Felting, cross stitch, back stitch, running stich, blanket stitch, sewing machine, presser foot, needle, seam, seam allowance, block</i>

			<i>Water soluble, chop, fry, form, breadcrumb, bake, stir fry</i>		<i>polyester, polyamide, elastane, poly-cotton.</i>	<i>printing, pattern, tie dye, thread, stitching.</i>
Assessment (methods to assess)	<ul style="list-style-type: none"> Peer assessment of the pewter casting designs. Verbal/whole class feedback on the filing/refining. 	<ul style="list-style-type: none"> End of unit assessment /30 	<ul style="list-style-type: none"> Peer assessment of the presentation of burgers. Verbal/whole class feedback on cooking. 	End of unit assessment /30	<ul style="list-style-type: none"> Peer assessment of the pewter casting designs. 	<ul style="list-style-type: none"> End of unit assessment /30
Links to other units in KS3/4.	<ul style="list-style-type: none"> Links to core knowledge needed at KS4 Starts preparing them for creating design ideas, rendering and annotating at KS4. 	<ul style="list-style-type: none"> Links to specialist knowledge and skills needed at KS4. 	<ul style="list-style-type: none"> Links to medium & high level cooking and presentation skills required for unit 2 Preparing core knowledge of hygiene, safety and healthy meal planning. 	<ul style="list-style-type: none"> Links to medium & high level cooking and presentation skills required for unit 2 Preparing core knowledge of hygiene, safety and healthy meal planning. 	<ul style="list-style-type: none"> Links to core knowledge needed at KS4 Starts preparing them for creating design ideas, rendering and annotating at KS4. 	<ul style="list-style-type: none"> Links to specialist knowledge and skills needed at KS4.