

Hobart High School Key Stage 3 Curriculum Map – Year 7

Department: Design Technology

	Unit Title	Knowledge & Skills Developed	Assessment	Personal Development
Rotation 1	Gears and movement Introduction to the workshop	H&S in the workshop Introduction to using hand tools and machines Gears, levers and cams Construction methods Reading a working drawing Understanding tolerances	Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment Machine testing	Safe working in the workshop Link to manufacturing lines
Rotation 2	Introduction to CAD/CAM and Graphics	Introduction to CAD/CAM - drawing using computer program Iterative design process Using the laser cutter safely Cutting and shaping materials using hand skills Development of drawing techniques and graphical skills Use of design brief and specification Understanding polymers Nets	Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment	Safe working in the workshop
Rotation 3	Healthy Eating	Knife and cutting skills Safe working practices Eat well guide – broken into sections and studied Healthy eating – understanding healthier choices Basic nutrition Food choices – seasonal, cultures, choices and adapting recipes Introduction to costings and nutritional values Introduction to evaluation in food Introduction to time plans Practical sessions 1. pasta salad – chopping skill practice 2. Ratatouille – chopping and use of the hob 3. Rock cakes – weighing, rubbing in and use of the	Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment	Safe working practices Healthy eating and food choices Nutrition

		<p>oven</p> <ol style="list-style-type: none"> 4. Fruit crumble – setting the oven, weighing, rubbing in, peeling, chopping 5. Vegetable muffins – weighing, grating, microwave use, portion control 6. Adapted muffins – weighing, oven, portion control, is it cooked 7. Scone based pizza – rubbing in, weighing, grating, rolling, designing, chopping 8. Bread rolls – yeast work, shaping, kneading, proving 		
Rotation 4	Nature based cushion	<p>Identifying textiles equipment and use safely Threading a sewing machine Basic stitches and when to use them Textile decorating and tie dying and applique Individual research to make design Outline planning steps Evaluate work Reflect on own and peer work Identify natural and man made fibres</p>	<p>Starters for 10 Endo of topic test Verbal feedback Peer, self and teacher assessment</p>	<p>Use of machine leaders Safety in the textiles room</p>

Hobart High School Key Stage 3 Curriculum Map – Year 8

Department: Design Technology

	Unit Title	Knowledge & Skills Developed	Assessment	Personal Development
Rotation 1	Amplifier casing and dye sublimation techniques	<p>Construction skills Image transfer skills CAD/CAM - use of laser cutter Use of design brief and specification Using the work of others Developing a design and modelling skills Timbers and boards Adhesives Design brief and specification</p>	<p>Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment DNA</p>	Sustainability and manufacturing
Rotation 2	Bluetooth amplifier	<p>Introduction to electronics Identifying a range of electronics components and their function – link to KS4 Introduction to soldering - safe practise and techniques Building a Bluetooth circuit. Assemble PCB and link components.</p>	<p>Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment Testing of circuit – fault finding</p>	
Rotation 3	Pastry	<p>Types of pastry Ingredients for pastry Function of ingredients Science of making pastry Bacteria and food poisoning Industrial production methods Batch production planning and cooking Evaluating foods Time plans</p> <p>Practical tasks:</p> <ol style="list-style-type: none"> 1. <u>Jam tarts</u> – shortcrust with demonstration and explanation of steps 2. <u>Roly poly</u> – suet crust with demonstration and explanation 	<p>Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment Peer support for practical work</p>	<p>Functions of ingredients adapting recipes Time management</p>

		<p>3. Savoury slices – cutting, shaping and glazing</p> <p>4. <u>Cheese straws</u> – weighing, shaping and flavouring pastry</p> <p>5. <u>Quiche</u> – making shortcrust pastry and a filling, building on skills for speed and accuracy</p> <p>6. <u>Palmiers</u> – rolling, chilling and care in cooking</p> <p>7. <u>Eccles cakes</u> – puff pastry with preparing filling, shaping and glazing</p> <p>8. <u>Ruff puff pastry</u> – making our own pastry, making laminations, importance of cold and resting. Making into sausage rolls next lesson, shaping and glazing, cooking meet – temperatures</p> <p><u>Bread based pizza</u> – recap on yeast, chopping, grating, shaping, flavouring,</p>		
<p>Rotation 4</p>	<p>Design and make a bag for a target group or specific use, with pockets and your own design of printed decoration.</p>	<p>Health and safety in textiles – good working practices</p> <p>Design to meet a theme, target group using key specification points – justified</p> <p>Evaluate your own and peers work suggesting improvements</p> <p>Independently thread a sewing machine, using appropriate stitches working safely</p> <p>Select appropriate equipment and components to use</p> <p>Produce basic draft pieces – pockets</p> <p>Understanding and demonstrating the basic principles of printing, making and using own blocks</p> <p>Carry out test/trialling with reasons for choices</p> <p>Adapt work and plans as necessary</p> <p>Test and evaluate final bag suggesting improvements</p>	<p>Starters for 10</p> <p>End of topic test</p> <p>Peer and self-assessment</p> <p>DNA marking</p> <p>Teacher written and verbal feedback throughout</p>	<p>Peer support</p> <p>Self-reflection</p> <p>Use of machine leaders</p>

Hobart High School Key Stage 3 Curriculum Map – Year 9

Department: Design Technology

	Unit Title	Knowledge & Skills Developed	Assessment	Personal Development
Rotation 1	Clock design	Development of modelling skills Design brief and specification Design development Manufacturing high quality outcome Product analysis 2d and 3d sketching – rendering final design Lifecycle analysis	Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment	Sustainability
Rotation 2	Casting jewellery – designing for others	Production methods incl batch production Metals and alloys Recycling, 6 ‘R’s’ Using influences from another culture Client profiling and designing for a client Ergonomics and anthropometrics Avoiding design fixation, design development	Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment	Researching jewellery from another culture
Rotation 3	Eggs	Eggs – where they come from Keeping hens – barn, caged, free range farming methods Function of eggs in recipes Nutrition of eggs Science in cooking eggs – experiments Scientific testing of egg custards – writing hypothesis and evaluating the results Safety in handling and storage of eggs Mayonnaise – emulsion, flavouring to make new sauces Baked Alaska – insulation of ice cream Range of practical lessons: <ol style="list-style-type: none"> 1. <u>Swiss roll</u> – aeration 2. <u>Chicken Kiev</u> – coating, handling of raw meat, temperature probe, storage of meat products 	Starters for 10 End of topic test Verbal feedback Peer, self and teacher assessment	Nutrition Scientific methods

		<ol style="list-style-type: none"> 3. <u>Scotch eggs</u> – hardboiled/coating 4. <u>Quiche</u> – coagulation 5. <u>Muffins</u> – raising agent 6. <u>Scones</u> – glazing <p><u>Mousse</u> – aeration/raw egg handling</p>		
Rotation 4	<p>Healthier eating for teens</p> <p>Introduction to food science</p> <p>Foods from other cultures</p> <p>Food Provenance</p>	<p>Eatwell guide and nutrients for teenagers</p> <p>Applying the knowledge to recipes</p> <p>Starch and gelatinisation</p> <p>Preparing dishes with a range of sauces</p> <p>Investigations of foods from other cultures and countries</p> <p>Understanding factors affecting food choice</p> <p>Food provenance</p> <p>Growing – fruit and vegetables</p> <p>Rearing – cattle, pigs, sheep and poultry</p> <p>Catching – fish and seafood</p> <p>Seasonality</p> <p>Practicals:</p> <ol style="list-style-type: none"> 1. Dauphinoise potatoes 2. TBC 3. Fish cakes 	<p>Starters for 10</p> <p>End of topic test</p> <p>Verbal feedback</p> <p>Peer, self and teacher assessment</p>	<p>Group work</p> <p>Eatwell guide and teenage nutrition</p> <p>Knowledge of cultures</p> <p>Scientific and investigation skill</p> <p>Nutrition</p> <p>Healthier food choices</p>