



Technology curriculum overview KS3

Technology curriculum overview – Year 8 (KS3)

Topic	Resistant Materials Pull Along Toy and Key ring holder	Textiles Technology Working with Fabric	Food Technology World Foods
Length of topic	12 Weeks	12 Weeks	12 Weeks
Links to National Curriculum	<ul style="list-style-type: none"> Understand how more advanced mechanical systems used in their products enable changes in movement and force Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture Identify and solve their own design problems and understand how to reformulate problems given to them 	<ul style="list-style-type: none"> Investigate new and emerging technologies Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses Develop and communicate design ideas using annotated sketches. 	<ul style="list-style-type: none"> Understand and apply the principles of nutrition and health Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet Become competent in a range of technical skills- use of bridge and claw, traditional creaming method, kneading a dough, accurate measuring of ingredients, safe use of electrical equipment. Use research and exploration, such as the study of different cultures, to identify and understand user needs
Assessment Task(s)	Lesson 5 - Diagnostic Assessment Identify equipment and Health and Safety Lesson 11 – End of Unit Knowledge Review	Lesson 6 –Diagnostic Assessment Surface decoration Lesson 11 - End of Unit Knowledge Review	Lesson 5 – Diagnostic Assessment - Food Miles Lesson 11 – End of Knowledge Review
Key Knowledge	Material categories, (wood and boards) properties and origins. The environment, sustainable resources. Material “finishes”. Developing Design Ideas. Rendering, Isometric drawing. Understanding of Computer Aided Design and Computer Aided Manufacture	Materials and their properties. Understanding of different standard components used in textile products. Sustainability - The 6'R	Understanding Food from around the World. Identify staple foods from a range of countries Food Miles Eat Well guide and Nutrition
Key Skills	Health and Safety, good practice. Working with tools, materials and workshop machinery. Assembling more complex components. Marking and measuring. Use of 2D Design Organisation, time keeping. Developing design skills. Exploring a theme. Taking pride in the presentation of work	Health and Safety, good practice. Working with tools, materials and machinery. Developing practical skills. Pattern making. Taking pride in the presentation of work.	Using the hob/frying Independently following a recipe using hygiene and safety Working to a time plan Use of bridge and claw techniques Correct use and selection of tools and equipment

Technology curriculum overview – Year 9 (KS3)

Topic	Product Design Wooden Plane/Wall Plaque	Textiles Technology Graffiti inspired Cushion Project	Food Technology The Principles of Nutrition and Technical Practical Skills
Length of topic	12 Weeks	12 Weeks	12 Weeks
Links to National Curriculum	<ul style="list-style-type: none"> Strengthen CAD skills Understand various manufacturing processes with a focus on casting Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists 	<ul style="list-style-type: none"> Analyse the work of past and present professionals and others to develop and broaden their understanding Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties 	<ul style="list-style-type: none"> Understand and apply the principles of nutrition and health Cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied diet Become competent in a range of Technical skills – Rubbing-in method, whisking method, making and kneading a dough, accurate weighing and measuring of ingredients, safe use of electrical ingredients and use of bridge and claw techniques. Understand the source, seasonality and characteristics of a broad range of ingredients.
Assessment Task(s)	<ul style="list-style-type: none"> Diagnostic Assessment – Use of wood and the environmental impact Testing and Evaluation of final products End of Knowledge Review 	<ul style="list-style-type: none"> Diagnostic Assessment – Design process Final product /making of the cushion End of Knowledge Review 	<ul style="list-style-type: none"> Diagnostic Assessment – Special Diets Self-assessment of practical skills End of Knowledge Review
Key Knowledge	Systems inputs, processors and outputs, Developing Design Ideas. User centered design Product evaluation and disassembly	Iterative design process Analysing and evaluating the work of others Manufacturing a textiles product Production methods Exploring the work of others	Understand different diets and benefits to health. Understand the function of a range of macro and micronutrients Adapting recipes Understand sensory descriptors
Key Skills	Modelling - Working with tools and materials Exploring a theme - Research Skills Communicating ideas - Drawing and rendering Oral and digital presentation skills Use of 2D Design	Developing design skills. Creating more complex components. Taking pride in the presentation of work. Exploring a theme. Developing a “design language”. Preparation for GCSE. Oral and digital presentation skills	Baking/whisking/rubbing in – Technical Skills Following a time plan Following Health Safety Making Pastry/bread Combining ingredients



Design & Technology curriculum overview KS4

Topic	Specialist based materials	Common specialist technical principles	New and emerging technologies	Energy, materials, systems and devices	Materials and their working properties	Designing and making principles
Length of topic (in weeks)	7 Weeks	8 Weeks	7 Weeks	6 Weeks	5 Weeks	6 Weeks
Links to specification	3.2 Specialist technical principles 3.3 Designing and making principles	3.2 Specialist technical principles 3.3 Designing and making principles	3.1 Core technical principles	3.1 Core technical principles	3.1 Core technical principles	3.3 Designing and making principles
Assessment Task(s)	Focused practical tasks Exam style questions End of topic assessment to identify gaps in learning.	Focused practical tasks Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.	Focused practical task Exam style questions End of topic assessment to identify gaps in learning.
Key Knowledge	Sources, origins and properties. Working with materials and fixings. Commercial manufacturing, surface treatments and finishes. Tolerances and allowances	Selection of materials or components forces and stresses ecological and social footprint stock forms, types and sizes scales of production Specialist tools , equipment, techniques and processes	Industry and enterprise Sustainability and the environment People culture and society Production techniques and systems Informing design decisions	Energy generation & storage Modern and smart materials Composite materials and technical textiles Systems approach to designing Electronic systems processing Mechanical devices	Papers and boards Natural and manufactured timbers Metals and alloys Polymers Textiles	Investigation, primary and secondary data The work of others Design strategies Communication of design ideas and prototype
Key Skills	Practical skills - How to shape and form using cutting, abrasion and addition How to sew, pleat, gather, quilt and pipe Communication	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Communication Organisation Technical principles Designing and making principles

Topic	Non Examined Assessment	Non Examined Assessment	Non Examined Assessment	Revision and Exam Preparation	Revision and Exam Preparation
Length of topic (in weeks)	7 Weeks	8 Weeks	7 Weeks	6 Weeks	10 Weeks
Links to specification	3.3 Designing and making principles NEA - AO1 Identify, investigate and outline design possibilities NEA section A & B	3.3 Designing and making principles NEA - AO2 Design and make prototypes that are fit for purpose NEA section C, D & E	3.3 Designing and making principles NEA - AO2 Design and make prototypes that are fit for purpose AO3 - Analyse and evaluate NEA section E & F	3.1 Core technical principles 3.3 Designing and making principles	3.2 Specialist technical principles
Assessment Task(s)	Monitoring of NEA AO1 – Section A & B	Monitoring of NEA AO2 & AO3– Section C, D & E	Monitoring of NEA AO2 & AO3 – Section E & F	Exam question twice per week completed. Written feedback given for students to responds to.	Exam question twice per week completed. Written feedback given for students to responds to.
Key Knowledge	Primary and secondary data The work of other Design strategies Prototype development Material management Specialist tools and equipment Tolerances Identifying & investigating design possibilities Producing a design brief & specification	Designing and making principles Ergonomics/ anthropometrics Design strategies The work of others Selection of materials and components Material management Specialist tools and equipment Specialist techniques and processes	Research techniques Ergonomics/ anthropometrics The work of others The design process Drawing techniques Tolerances/marking out and materials management H&S Surface treatments	Review, revise and recall learning on 3.1 Core technical principles 3.2 Specialist technical principles 3.3 Designing and making principles	Review, revise and recall learning on 3.1 Core technical principles 3.2 Specialist technical principles 3.3 Designing and making principles
Key Skills	Creativity Problem solving Communication Organisation Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Creativity Problem solving Communication Organisation Technical principles Designing and making principles	Exam preparation Communication Organisation Technical principles	Exam preparation Communication Organisation Technical principles Recall and revision



Food Preparation & Nutrition curriculum overview KS4

Topic	Food Preparation Skills	Food Nutrition and Health	Food Science	Food Safety	Food Choices	Food Provenance
Length of topic (in weeks)	7 Weeks	8 Weeks	7 Weeks	6 Weeks	6 Weeks	6 Weeks
Links to specification	3.1: Food Preparation Skills	3.1: Food Preparation Skills 3.2: Food, Nutrition and Health	3.1: Food Preparation Skills 3.3: Food Science	3.1: Food Preparation Skills 3.4: Food Safety	3.1: Food Preparation Skills 3.5: Food Choice	3.1: Food Preparation Skills 3.6: Food Provenance
Assessment Task(s)	Focused practical task Exam style questions End of Unit test	Focused practical task Exam style questions End of Unit test	Focused practical task Exam style questions End of Unit test	Focused practical task Exam style questions End of Unit test	Focused practical task Exam style questions End of Unit test	Focused practical task Exam style questions End of Unit test
Key Knowledge	<p>Food Preparation Skills</p> <p>Knife Skills Fish Meat Prepare, combine and shape Dough</p> <p>Practical List Knife skills Bread Pizza Pastry - shortcrust Own choice chosen from a selection</p>	<p>Food Nutrition and Health</p> <p>Protein and Fat Carbohydrate Vitamins Minerals and Water Making informed choices Diet, Nutrition and Health</p> <p>Practical List Dough – bread based Fat investigation Fats in pastry - Puff pastry products Flaky pastry products</p>	<p>Food Science</p> <p>Cooking of food, Heat transfer and Selecting Appropriate cooking Methods Proteins and Enzymic Browning Carbohydrates Fats and Oils Raising Agents</p> <p>Practical List</p> <p>Protein based practical Carbohydrate based practical Use of raising agents Own choice chosen from a selection</p>	<p>Food Safety</p> <p>Microorganisms, Enzymes and Food Spoilage Microorganisms in food production Bacterial Contamination Buying and Storing Food Preparing and Cooking Food</p> <p>Practical List Tofu and coconut milk curry and rice Vegetable and bean casserole Vegetarian cottage pie / Bolognese sauce/chill Lentil and bean roast Own choice chosen from a selection</p>	<p>Food Choices</p> <p>Food Choices British and international Cuisines Sensory Evaluation Food Labelling Factors Affecting Food Choices</p> <p>Mock NEA 1 Practical Individual Recipes</p>	<p>Food Provenance</p> <p>Food and the Environment Food Provenance and Production Methods Sustainability of food Food production Food Processing</p> <p>Mock NEA2 Meal Planning</p>
Key Skills	<p>Accurate knife skills Accurate weighing/measuring of ingredients Able to combine range of ingredients Importance of hygiene and safety Accurate timings Working independently to follow a recipe</p>	<p>Identify main macro/micro nutrients and their function/access/deficiency How nutritional needs change in life stages BMR/PAL Major diet related health risks</p>	<p>Identify and choose appropriate cooking methods How food is cooked through conduction/convection and radiation</p>	<p>Identify High Risk Foods enzymic action/ mould growth/ yeast action. campylobacter • e-coli • salmonella • listeria • staphylococcus aureus. Temperatures: Danger zone/fridge/freezers</p>	<p>physical activity level (PAL) • celebration/occasion • cost of food • preferences • enjoyment • food availability • healthy eating • income • lifestyles • seasonality • time of day • time available to prepare/ cook. Students must be able to cost recipes and make modifications.</p>	<p>organic and conventional farming • free range production intensive farming • sustainable fishing • advantages and disadvantages of local produced foods, seasonal foods and Genetically Modified (GM) foods.</p>

Topic	NEA 1 Food investigation (30 marks)	NEA 2 Food preparation assessment	NEA 2 Food preparation assessment	NEA 2 Food preparation assessment	Exam Preparation	Exam Preparation
Length of topic	5 weeks	7 Weeks	8 Weeks	7 Weeks	6 Weeks	5 weeks
Links to specification	3.3 Food Science	3.7: Food Preparation and cooking techniques Section A – Researching the Task Section B – Demonstrating Technical Skills	3.7: Food Preparation and cooking techniques Section B – Demonstrating Technical Skills Section C – Planning for the final Menu	3.7: Food Preparation and cooking techniques Section D – Making the final dishes during the 3 hour practical session Section E – Analysis and Evaluate.	3.1: Food Preparation Skills 3.2: Food, Nutrition and Health	3.3: Food Science 3.4: Food Safety 3.5: Food Choices 3.6: Food Provenance
Assessment Task(s)	Set by AQA	Monitoring of NEA AO3 & A04	Monitoring of NEA AO3 & A04	Monitoring of NEA AO3 & A04	Mock Examination	Exam Questions
Key Knowledge	Students must be able to show: Students' understanding of the working characteristics, functional and chemical properties of ingredients.	Plan and carry out research into chosen life stage, dietary group or culinary tradition. Develop research skills to gather and use primary and secondary sources of information. Develop analysis and evaluation skills and explain how findings will influence practical investigations.	Select a range of three or four suitable dishes to trial further. Justify choices and explain suitability, creativity and technical skill. Record evidence of the choice of dishes made during the technical skills demonstration. Demonstrate a good understanding of ingredients and making processes. Justify reasons for choice of final dishes and menu with reference to skills, ingredients, nutrition, cooking methods, costs, provenance, sensory properties and portion size.	Prepare, cook and serve three final dishes in one three-hour making session demonstrating some complexity and challenge. Execute a range of technical skills with confidence, precision and accuracy. Select and use appropriate equipment accurately. Demonstrate a range of appropriate finishing and presentation techniques. Cost the final dishes. Evaluate the success of the dishes and identify improvements.	Reinforce/revisit Knife Skills Fish Meat Prepare, combine and shape Dough Protein and Fat Carbohydrate Vitamins Minerals and Water Making informed choices Diet, Nutrition and Health	Reinforce/revisit Cooking of food, Heat transfer and Selecting Appropriate cooking Methods Proteins and Enzymic Browning Carbohydrates Fats and Oils Raising Agents Microorganisms, Enzymes and Food Spoilage Microorganisms in food production Bacterial Contamination Buying and Storing Food Preparing and Cooking Food Food Choices Factors Affecting Food Choices Food Provenance and Production Methods Sustainability of food
Key Skills	Application of Knowledge	Application of Knowledge Research Skills Analysis and evaluation skills Planning skills	Creativity and presentation skills Technical Skills Work safely and hygienically Sensory analysis Time planning and costing	Creativity and presentation skills Technical Skills Work safely and hygienically Organisational skills Time planning and costing Analysis and evaluation skills	Application of Knowledge	Application of Knowledge



Hospitality & Catering curriculum overview KS4

Topic	Hospitality and Catering Provision	Hospitality and Catering Provision	How Hospitality and Catering Provisions Operate	Health and Safety in Hospitality and Catering	Food Safety in the Hospitality Catering Industry (including 2 weeks for mock exam revision)
Length of topic (in weeks)	8 weeks	8 Weeks	10 Weeks	8 Weeks	7 Weeks
Links to specification	1.1.1 Hospitality and Catering providers 1.1.2 Working in the Hospitality and Catering Industry	1.1.3 Working conditions in the hospitality and catering industry 1.1.4 Contributing factors to the success of hospitality and catering provision	1.2.1.The Operation of the front and back of house 1.2.2 Customer requirements in hospitality 1.2.3 Hospitality and Catering Provision to Meet Specific Needs	1.3.1. Health and Safety in the H&C Industry 1.3.2 Food Safety	1.4.1.Food Related causes of ill health 1.4.2 Symptoms and signs of food induced health 1.4.3 Preventative control measures of ill induced health 1.4.4.EHO
Assessment Task(s)	Focused practical tasks to develop key practical skills Practical assessment Diagnostic Assessment Exam style questions to reinforce knowledge Written feedback/targets set	Focused practical tasks to develop key practical skills Practical assessment Exam style questions to reinforce knowledge Written feedback/targets set Diagnostic assessments End of Unit Knowledge Review	Focused practical tasks to develop key practical skills Practical assessment Exam style questions to reinforce knowledge Written feedback/targets set Diagnostic Assessments	Focused practical tasks to develop key practical skills Case studies Practical assessment Exam style questions to reinforce knowledge Written feedback/targets set Diagnostic Assessment End of Unit Knowledge review	Focused practical tasks to develop key practical skills Practical assessment Case studies Exam style questions to reinforce knowledge Written feedback/targets set Diagnostic Assessment Year 10 Mock exam
Key Knowledge	1.1.1 Commercial/non-commercial Structure of the Industry and types of establishments that provide food and drink The types of services available in different establishments Styles of service Standards and ratings 1.2: The different roles and duties within the industry – front and back of house/kitchen brigade The training available for staff within the industry	1.1.3: Describe working conditions Types of Contracts Rates of pay Costing 1.1.4. Contributing factors to the success of H&C provision <ul style="list-style-type: none"> Basic calculation of gross profit and net profit within the hospitality and catering industry. How the economy can impact business Importance of environmental needs and the environmental impact within the hospitality and catering industry New technology impacts the hospitality and catering service industry in a positive way Positive and negative impacts that the media types can have on the hospitality and catering industry 	1.2.1.Describe the operations of the kitchen Operations of the kitchen Work flow Kitchen layout/equipment Stock control/ documentation Dress code 1.2.1. Operational activities of front of house Food service/equipment/stock control/dress code/ Record keeping 1.2.3 Meeting customer requirements Types of customer Customer trends Customer service Customer rights/ law Equality	1.3.1 Health and Safety in the H&C Industry Employee Responsibilities/ HASAWA Employer Responsibilities Accidents at work Preventions First aid Fire safety COSHH PPE/PPER/MHOR Identify risks to personal safety Risk assessment for all employees in front of house/back of house/customers/suppliers Recommend personal safety control measures for HCI Prevention Control measures 1.3.2. HACCP and risk assessment Identified CCP's	1.4.1 Microbes/cross-contamination/moulds/yeasts Bacterial growth Common names Sources of bacteria Types of food poisoning Symptom comparison Chemicals Metals Poisonous plants Allergies and Intolerances 1.4.2. Symptoms, - visible and nonvisible 1.4.3. Correct temps for storage/delivery/cross contamination/safe preparation 1.4.4. Role and responsibilities of EHO EHO's Roles and responsibilities
Key Skills	Identify types of commercial/noncommercial sectors Types of food service systems HC standards and ratings:	Employment rights and contracts Factors affecting the success of hospitality and catering providers	Application of knowledge to identify structures of kitchen brigade/front of house Identify how customer requirements are met in given HC establishments	Identify the legislation needed in different HC establishments Assess risks to employees in different scenarios	Identify: Food poisoning symptoms/types of food poisoning Explain how to deal with allergies Identify risks in a HC environment

Topic	Unit 2: Controlled Assessment Practise	Unit 2: Controlled Assessment	Unit 2: Controlled Assessment	Exam Preparation	Exam Preparation
Length of topic (in weeks)	7 weeks	6 weeks	6 weeks	6 weeks	10 weeks
Links to specification	LO 2: Understand Menu Planning LO 3: Be able to cook dishes	LO 1: Understand the importance of nutrition when planning menus	LO 2: Understand menu planning LO 3: Be able to cook dishes	LO1: Understand the environment in which hospitality and catering providers operate LO2: Understand how hospitality and catering provision operates	LO3: Health and safety LO4: Know how food can cause ill health
Assessment Task(s)	Produce Production plan Practical assessment with witness statement and feedback	Set by WJEC	Set by WJEC	Practise exam questions Case studies Mock Exam	Practise exam questions Case studies
Key Knowledge	AC 2.3: Explain how menu dishes meet customer needs AC 2.4: Plan production of dishes for a menu AC 3.1 Use techniques in preparation of commodities AC 3.2: Assure quality of commodities AC 3.3: Use techniques in cooking of commodities AC 3.4: Complete dishes using presentation techniques AC 3.5: Use food safety practices	AC:1.1 – 1.4, 2.1 – 4 and 3.1 -5 All criteria MUST be covered for each LO to ensure a grade. Application/re calling of knowledge for LO1. Planning a menu and a production plan for LO2 2.1 -3 Producing a detailed time plan for 2.4 – initial plan LO3 shown through 3 hours practical assessment task – practise	Planning a menu and a production plan for LO2 2.1 -3 AC 2.1: Factors to consider when proposing dishes AC 2.2: Explain how dishes on a menu address environmental needs AC 2.3: Explain how menu dishes meet customer needs 2.4 Producing a detailed time plan- final LO3 shown through 3 hours practical assessment task- March	Reinforce/revisit: Structures of HCl/commercial and non commercial Job descriptions and contracts Operations within the kitchen/front of house HC provision	Reinforce/revisit Personal safety Laws HACCP/risk assessment Food related illness: food poisoning/allergies Food safety legislation EHO
Key Skills	Working independently Able to follow a production plan for 2 given products within an allocated time Working safely and hygienically	All key skills shown in half term 1 and 2 will be demonstrated	All key skills shown in half term 1 and 2 will be demonstrated	Application of knowledge to given scenarios and questions	Application of knowledge to given scenarios and questions