








**Curriculum Map**

	Technology 'at a glance'					
	AUTUMN		SPRING		SUMMER	
	DT	Food	DT	Food	DT	Food
<b>YEAR 7</b>	Materials and their properties Health and safety in the workshop.	Safety and hygiene in the kitchen	Designing and making using CAD/CAM	Food miles Reducing food waste	Jon Burgerman Textiles Project	Diet and nutrition Eatwell guide
<b>YEAR 8</b>	Design and Make a clock	Adapting Recipes for different needs	Energy Generation Systems and Control	Functional Properties of food	Dark activated light – Aluminium lampshade	Food Commodities
<b>YEAR 9</b>	Passive Amplifier Mechanisms	Food Safety and hygiene	CAD/CAM Phone Stand project	Foods of the world	Textiles Tote bag Project	Food Provenance
<b>YEAR 10</b> V Cert: Food and Catering	<b>Health and Safety relating to food, nutrition and the cooking environment. Food Legislation</b>		<b>Food Provenance Food groups, key nutrients and a balanced diet</b>		<b>Factors effecting food choice The characteristics and functions of ingredients</b>	

<b>YEAR 11 V Cert Food and Catering</b>	<b>NEA Delivery</b>	<b>Exam Preparation NEA Delivery</b>	
<b>Year 11 GCSE Food Preparation and Nutrition</b>	<b>NEA 1: Food Investigation</b>	<b>NEA 2: Food Preparation Assessment</b>	
<b>Year 10 V Cert: Creative Design and Production</b>	<b>Design and production in context Design materials and processes Mirror project</b>	<b>Design brief and production processes</b>	<b>Presentation of a design solution Lighting Project</b>
<b>Year 11 V Cert Creative Design and Production</b>	<b>NEA: Design and Make Project</b>	<b>NEA Design solution Exam Preparation</b>	





Technology Curriculum Map	
<b>St. Cuthbert's Curriculum Vision</b> 	The curriculum at St Cuthbert's provides ambitious educational opportunities for all members of our community. The curriculum equips our students with the knowledge, skills and personal characteristics they need to flourish as literate, articulate, global citizens who fulfil the Catholic Mission to bring about the Common Good.

YEAR 7 DT		AUTUMN	SPRING	SUMMER
Year 7 Design and Technology	Overview	<b>Introduction to materials: Timbers.</b> Health and safety in the workshop. Pupils build their knowledge of skills to carry out a range of processes to make a pencil box in the workshop.	<b>Designing and making using CAD/CAM</b> Pupils are introduced to the capabilities of CAD and CAM to design and make a component in a product.	<b>Textile Jon Burgerman Project</b> This unit introduces pupils to the working properties of textiles. Pupils learn about the skills and process used to create textiles product.
	Content	<u><b>Knowledge:</b></u> <ul style="list-style-type: none"> <li>• Different materials have different properties and uses.</li> <li>• The impact designers have on the environment</li> <li>• How to work safely in the workshop.</li> <li>• Have knowledge of specialist skills and techniques; hand tools, rebate joint, joining and finishing timber.</li> </ul> <u><b>Skills:</b></u> <ul style="list-style-type: none"> <li>• Using hand tools for different purposes, pillar drill, disc sander.</li> <li>• Use 3D drawing techniques</li> <li>• Measure and carry out practical techniques</li> <li>• How to use CAD/CAM</li> </ul>	<u><b>Knowledge:</b></u> <ul style="list-style-type: none"> <li>• Knowledge of how to use CAD Programs such as 2D Design and Tinker CAD.</li> <li>• Different 3D drawing techniques</li> <li>• Have knowledge of specialist skills and techniques; line bending, laser cutting.</li> </ul> <u><b>Skills:</b></u> <ul style="list-style-type: none"> <li>• Develop a 2D Design template</li> <li>• Use heat to shape plastic</li> <li>• Create a finished product on a 3D CAD programme.</li> </ul>	<u><b>Knowledge:</b></u> <ul style="list-style-type: none"> <li>• Different types, properties and uses of textiles.</li> <li>• Different methods of making textiles.</li> <li>• Have knowledge of specialist skills and techniques; hand sewing, pattern making, machine sewing applique and tie dye.</li> <li>• Know how to design within a design specification.</li> </ul> <u><b>Skills:</b></u> <ul style="list-style-type: none"> <li>• Develop a design for the textile monster</li> <li>• Create a paper pattern for their own design.</li> <li>• Use hand stitching to assemble parts the final design.</li> <li>• Develop annotated design ideas which meet the design brief.</li> </ul>

YEAR 7 DT		AUTUMN	SPRING	SUMMER
	Assessment	<p><b>Introduction to materials:</b> Timbers, plastics and metal. Health and safety in the workshop. Pupils build their knowledge of skills to carry out a range of processes in the workshop.</p>  <p><b>Solidarity and the common good</b> - Showing respect to environment by making an effort to recycle materials, reducing waste and reduce our carbon footprint.</p>  <p><b>Rights and Responsibilities</b> - Respect the safety of ourselves and others when working in the workshop.</p>	<p><b>Designing and making using CAD/CAM</b> Pupils are introduced to the capabilities of CAD and CAM to design and make a component in a product.</p>  <p><b>Rights and Responsibilities</b> - Respect the safety of ourselves and others when working in the workshop.</p>  <p><b>Dignity of work</b> - Different job roles relating to Dt are discussed as we progress through the different projects</p>	<p><b>Textiles Monster: Building a circuit</b> This unit introduces pupils to the working properties of textiles. Pupils learn about the components required to make a circuit to incorporate into their textile design.</p>  <p><b>Stewardship</b> - Showing respect to environment by making an effort to recycle materials, reducing waste and reduce our carbon footprint.</p>  <p><b>Option for the poor</b> - All equipment and materials are provided for pupils to take part in the activities.</p>
	Key vocabulary	Thermoplastic, polymer, Manufactured boards, Thermoset, Hardwood, Softwood, Hazard, Precaution, Personal protective equipment – PPE, Machine tool.	CAD, CAM, Malleable, Recycling, Isometric drawing, Sustainability, Reusing, Strip heater, Rebate, Adhesive	Fibre, Yarn, Natural fibres, Synthetic fibres, Woven, Knitted, non-woven, paper pattern, presser foot, weft, warp.

YEAR 7 DT		AUTUMN	SPRING	SUMMER
	Links to prior learning	In the first unit pupils learning builds upon the National Curriculum Key Stage 1 & 2 requirements. National Curriculum Key Stage 1 & 2 states pupils will have been taught knowledge and skills from primary skills where they will have used a basic range of skills to perform practical tasks. They will have built structures and investigated how to make them stronger and had the opportunity to select from a range of materials and components. The learning in this unit leverages more sophisticated resources and specialised equipment. Pupils will also draw upon the knowledge from other subjects such as Maths, Science and Art.		
	Links to future learning	Pupils embark on learning a range of transferable practical skills and learn the health and safety rules of a working environment. Knowledge of materials and their uses gives the learners insight into the iterative design process and global manufacturing. These skills are an imperative foundation to the sequence of learning as pupils progress through the curriculum.		
	Why this now?	The learning in Autumn Term Yr 7 equips students with a sound basis of practical/workshop skills and knowledge of materials and their properties to experience success throughout KS3; it also provides a platform for future learning at KS4.		
	Links to resource to support learning at home	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr7 Dt Knowledge Organiser	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr7 Dt Knowledge Organiser	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr7 Dt Knowledge Organiser

YEAR 7 Food		AUTUMN	SPRING	SUMMER
Year 7	Overview	This unit introduces pupils to safety and hygiene requirements in the kitchen. Ensuring pupils have a good understanding of how to minimise the risk of food spoilage and food poisoning. Introduction to the kitchen, working with equipment and ingredients.	Pupils investigate where our food comes from and the impact the food we eat has on the environment. Pupils investigate reasons for the vast amount of food waste in this country and how it can be reduced.	This unit allows pupils to expand on their knowledge of healthy eating. Use research and exploration to identify and understand the names, function and food sources for the 3 macro nutrients and a range of micro nutrients.
	Content	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>Personal hygiene and safety in the kitchen.</li> <li>Safety precautions when buying and storing high risk foods to minimise the risk of food poisoning.</li> <li>General practical skills</li> </ul> <p>Practical skills:</p> <ul style="list-style-type: none"> <li>Fruit salad: Knife skills, kitchen organisation.</li> <li>Chicken goujons: Coating, using the oven.</li> <li>Tortilla quiche: Grating, measuring.</li> </ul>	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>Food provenance: Food is grown, caught or reared.</li> <li>Food and the impact on the environment.</li> <li>How to reduce food waste</li> </ul> <p>Practical skills:</p> <ul style="list-style-type: none"> <li>Fruit scones: making a dough, rolling out, cutting</li> <li>Stir fry: Knife skills, frying</li> <li>Apple crumble: Peeling, coring, rubbing in</li> </ul>	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>Functions and food sources of a range of macro and micro nutrients.</li> <li>Eat well guide</li> <li>8 Healthy eating guidelines</li> </ul> <p>Practical skills:</p> <ul style="list-style-type: none"> <li>Bolognese: Knife skills, reduction sauce.</li> <li>Pasta salad: Controlling the hob, grating, making a dressing</li> <li>Fruit muffins: weighing measuring, accuracy</li> </ul>
	Key vocab	Personal Hygiene, Bacteria, Clean Apron Coating, High Risk Foods, Cross Contamination, Enzymic Browning, Sensory Testing, Aroma, Texture	Cooking Methods, Coagulation, Seasonal foods, Baking, Balanced Diet, Macro Nutrients, Micro Nutrients, Healthy Diet The Eatwell Guide, Rubbing in method	Emulsion, Dietary Needs, Target Market Boiling, Simmering, Conduction, Fibre, Adapting recipes, Glaze, Saturated fat

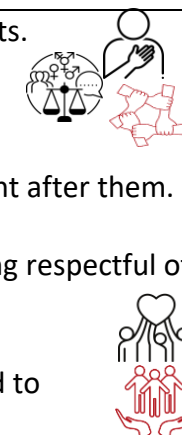
YEAR 7 Food		AUTUMN	SPRING	SUMMER
	Assessment outline			
	    <b>CST</b>	<p>Option for the poor and venerable - Pupils are encouraged to participate in all practical tasks, funds are accessed so practical activities are inclusive and affordability is not a barrier</p> <p>Family and Community –. Recipes are carefully selected to ensure the a affordable to all. Pupils are taught to cook healthy and nutritional dishes for others.</p> <p>Dignity of the human person – Pupils are taught how to prepare dishes in a safe and hygienic way so as not to cause harm to others.</p> <p>Stewardship – Pupils explore food provenance and different types of farming. Pupils investigate the animal welfare in the production of food commodities.</p>		
	Links to prior learning	<p>In Yr 7 Autumn Term the students learning builds upon the National Curriculum Key Stage 1 and 2 statutory requirements. Pupils will become more competent in a range of cooking techniques selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients as the NC sets out.</p> <p>This will also enable pupils to draw on skills from primary school such as maths in weighing, measuring of ingredients, English when reading instruction sheets and Science with the functions of ingredients such as coagulation.</p>		
	Links to future learning	<p>This unit also allows the introduction of current food issues as pupils will develop their knowledge of the wider world by investigating seasonality and using locally sourced foods and how this can support local communities and the wider world through the reduction of pollution which can help the environment.</p> <p>The skills established will provide a platform enable pupils to further develop recipes, leading to more challenge in relation to practical tasks and opportunities to apply these principles to how the foods we eat impact on nutrition and health.</p>		



YEAR 7 Food		AUTUMN	SPRING	SUMMER
	Why now?	The learning in Autumn Term Yr. 7 equips students with a sound basis of practical skills and knowledge of how to combine ingredients to experience success throughout KS3; it also provides a platform for future learning at KS4. The learning in Autumn Term Yr 7 equips students with a sound basis of practical/workshop skills using textiles, timber and plastics. The knowledge of sources of materials, environmental impact of materials and their properties to experience success throughout KS3; it also provides a platform for future learning at KS4.		
	Assessment	Exit tickets Live marking Multiple choice questions (Forms) Summative assessment date: (1) 20-30 Nov (2) 3-14 June		
	Links to resource to support learning at home	<a href="#">Food and health</a>  <a href="#">Food and nutrition</a>  <a href="#">Farm to plate</a>  <a href="#">Seasonal Food</a>		

YEAR 8		AUTUMN	SPRING	SUMMER
	Overview	In this unit pupils investigate the needs and wants of the user to determine a design specification. Pupils build on their practical skills from yr7 expanding their knowledge with a new range of skills and processes.	This project combines previous learnt skill and techniques combining technical knowledge of electronics to develop understand how more advanced electrical and electronic systems can be powered and used in their products.	Pupils produce a lamp shade using sheet aluminium considering the influences of the theme. Pupils produce a net of their own design. Pupils learn about paper and boards and design packaging for their lamp.
	Content	<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>How to investigate a design context and offer solutions.</li> <li>How to consider a range of techniques to construct a product which is fit for purpose.</li> <li>How energy is generated and the environmental implications.</li> </ul> <p><b><u>Skills:</u></b></p> <ul style="list-style-type: none"> <li>Use CAD to produce a graphic image</li> <li>Finishing techniques on timber</li> <li>Joining techniques</li> </ul>	<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>Systems and control: How systems are designed and work together.</li> <li>Pupils apply computing and use electronics to produce a product that responds to inputs and control outputs.</li> <li>Pupils will learn about how electronics can be used to embed intelligence in products that respond to inputs and control outputs</li> <li>How to build an electronic system</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Assembling and soldering parts of a circuit</li> <li>Working within the constraints to produce own idea</li> </ul>	<p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>Investigate different categories of metals, how metal is made and the environmental impacts.</li> <li>Processes used to make products from metal.</li> <li>Investigate papers and boards, consider cutting methods</li> <li>Design in isometric.</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Design a product using the animal theme.</li> <li>How to mark out cut and shape metal.</li> <li>Design a packing solution for the lamp.</li> </ul>

YEAR 8		AUTUMN	SPRING	SUMMER
	Assessment	MCQ (Forms) Practical Progress log Do now/Exit tickets Summative Assessment: 20-30 Nov	MCQ (Forms) Practical Progress log Do now/Exit tickets	MCQ (Forms) Do now/Exit tickets Practical Progress log Summative Assessment: 3-14 June
	Key Vocab	Client, Culture, Cultural, Design Brief Aesthetics, Constraint, Fossil fuels, Renewable energy sources, Surface finish, Function, Nuclear power	Circuit diagram, Electrical conductivity Systems thinking, Input, Output	Soldering, LED, Passive component Light Dependant Resistor, Thermistor
	CST	<p><b>Dignity of work</b> - Different job roles relating to DT are discussed as we progress through the different projects.</p> <p><b>Rights and responsibilities/ Solidarity of the common good</b> - Pupils are encouraged to take part in practical activities with an emphasis on taking care not to cause to compromise others safety. Take care to follow classroom rules, look after equipment and machinery in order to ensure others are able to use the equipment after them.</p> <p><b>Family and community</b> - Exploration of solidarity and community when exploring different cultures and being respectful of these cultures in the clock project.</p> <p><b>Dignity of the human person</b> - Pupils investigate the physical needs of different types of people and respond to these needs.</p>		
	Assessment			



YEAR 8		AUTUMN	SPRING	SUMMER
	Links to prior learning	Pupils have now experienced a breadth of skills and techniques in year 7 whilst investigating the properties and characteristics of materials. This lighting project combines skills previously learnt skills and techniques from KS2 combining technical knowledge of electronics to develop understand how more advanced electrical and electronic systems can be powered and used in their products.		
	Links to future learning	Pupils will embark on the iterative design process of where they will take inspiration in order to creative imaginative ideas. Building on knowledge from year 7 pupils will work more independently whilst developing and making the product with the needed of the intended user and consider inclusivity. Moving further into year 8 this unit will equip them with the further knowledge and skills and the ability to apply them in their own design response.		
	Why this now?	Pupil now have a bank of practical knowledge to select from. Pupils have the opportunity to experience CAD/CAM in order to manufacture parts of the clock. The learning from year 7 and 8 equips students with a sound basis of practical/workshop skills and knowledge of materials and their properties, this unit allows further breadth of knowledge in order to design and evaluate the success of theirs and others work.		
	Links to resource to support learning at home	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr8 Dt Knowledge Organiser	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr8 Dt Knowledge Organiser	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr8 Dt Knowledge Organiser

YEAR 8 Food		AUTUMN	SPRING	SUMMER
Year 8	Overview	Pupils building their knowledge of nutrition and learn about the nutritional needs of different age groups. This unit allows pupils to consider the importance of energy balance and a healthy lifestyle.	Pupils investigate the factors effecting food choice, relating to health needs. Pupils further develop their understanding of health lifestyles and investigate how to reduce the risk of diet related illnesses. Pupils investigate functional properties of ingredients in a range of dishes.	Pupils investigate food commodities, exploring how food travels from farm to fork. Learning how grains are harvested and turned to flour. As well as how milk in processed and turned to cheese and yoghurt.
	Content	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> <li>Nutritional needs for different groups of people</li> <li>Energy balance and BMR</li> <li>Nutritional analysis and adapting recipes</li> </ul> <p><u>Practical skills:</u></p> <ul style="list-style-type: none"> <li>Chicken noodles: knife skills, using the hob, stir frying</li> <li>Potato salad: Sauce making, knife skills, hob/ boiling</li> <li>Shepherd's pie: Peeling, knife skills, simmering, reduction sauce.</li> <li>Rogan josh curry: seasoning, knife skills, reduction.</li> </ul>	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> <li>Dietary health needs.</li> <li>Food allergens and intolerances.</li> <li>Vegetarian/veganism</li> <li>Functions of ingredients: Sauce making and bread making</li> </ul> <p><u>Practical skills:</u></p> <ul style="list-style-type: none"> <li>Macaroni cheese: Gelatinisation, grating</li> <li>Bread: kneading, proving</li> <li>Pizza: knife skills, presentation, baking</li> </ul>	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> <li>Cereals – Turning wheat to flour</li> <li>Oats and rice: The journey from farm to fork</li> <li>Milk and cheese – Processing and their uses.</li> </ul> <p><u>Practical skills:</u></p> <ul style="list-style-type: none"> <li>Cookies: making a dough</li> <li>Flapjacks: melting method</li> <li>Cheese straws: Pastry, cutting and shaping</li> </ul>

YEAR 8 Food		AUTUMN	SPRING	SUMMER
	Key Vocab	Nutrients, Balanced diet, Macro Nutrients, Micro Nutrients, Nutritional Needs, Nutritional analysis, Reduction Sauce, Adapt Food Poisoning Bacteria, Gelatinisation	Food Choice, Health Conditions, Baking Powder, Vegetarian, Vegan, Lactose Intolerant, Coeliac Disease, Allergens, Sensory Evaluation, Gluten	Energy Balance, Type 2 Diabetes, Costing, Biological Raising Agent Knock back, Proving, Fermentation Dough, Aeration, Starch
	Assessment	Do now / Exit tickets Live marking Multiple choice questions (Forms) Summative Assessment: (1) 20-30 Nov (2) 3-14 June		
	CST	<p><b>Dignity of the human person</b> – Pupils are taught the nutritional requirements of different life stages so dishes can be adapted so they are healthy and nutritious for all, minimising the risk of health problems in the future. Pupils continue to develop their knowledge of how to prepare dishes in a safe and hygienic way so as not to cause harm to others.</p> <p><b>Option for the poor and venerable</b> - Pupils are encouraged to participate in all practical tasks, funds are accessed so practical activities are inclusive and affordability is not a barrier</p> <p><b>Family and Community</b> –. Recipes are carefully selected to ensure they are affordable to all. Pupils are taught to cook healthy and nutritional dishes for others.</p> <p><b>Stewardship</b> – Pupils learn about the impact of food production on the environment and how food miles contribute to the carbon footprint.</p>		
	Links to prior learning	<p>Pupils have used their previous knowledge on nutrition and a balanced diet and applied this to the nutritional needs of a variety of different groups of consumers. Pupils will have the opportunity to expand on their repertoire of practical skills as more complex and challenge is offered in the recipes selected.</p> <p>Moving into year 8 pupils will broaden their knowledge and understanding of how to enjoy a healthy varied diet for themselves as well as other groups. The practical tasks involved in this learning allow the application of previously taught skills relating to the preparation and selection of equipment and ingredients with more independence. Each practical then focuses on specific practical techniques links with food science and quality control.</p>		

YEAR 8 Food		AUTUMN	SPRING	SUMMER
	Links to future learning	The specific skills such as combining ingredients and sauce making taught in this unit of work provides pupils with further knowledge and the ability to investigate food science, such as the process of gelatinisation using an all in one starch based sauce and binding food with eggs to produce meatballs. This will enable pupils to apply their knowledge and understanding of gelatinisation and shortening to more complex dishes such as meat and potato pie in Year 9. This learning prepares a platform for pupils in year 9 when they will develop their practical skills and the ability to follow more complex recipes; such as making a pizza which will be shaped and flavoured, as well as making a reduced sauce as part of the topping.		
	Why this now?	The learning in first unit of food in Yr 8 equips students with a sound basis of practical skills and techniques as well as knowledge of how different life stages need to eat healthily as well as building on knowledge of the properties of ingredients in order to experience success throughout KS3; it also provides a platform for future learning at KS4. The learning in this unit allows pupils to understand why we have to use certain ingredients for certain dishes and the science behind our food including the importance of chemical reactions. It also reinforces the importance of accurate weighing and measuring and application of heat.		
	Links to resource to support learning at home	<a href="https://www.foodafactoflife.org.uk/11-14-years/">Food and health www.foodafactoflife.org.uk/11-14-years/</a>		

YEAR 9 DT		AUTUMN	SPRING	SUMMER
Year 9	Overview	<b>Passive amplifier and mechanisms</b> Pupils will learn mechanical systems used in their products enable changes in movement and force. Pupils will develop on their practical skills	<b>Textile tote bag Project</b> Pupils explore the environmental impact of fast fashion. Design and produce a reusable shopping bag using a range of techniques.	<b>Organiser for a specific use</b> This project focuses on Iterative design and understanding the needs of the user. As a user of a mobile phone students can combine both user centred and iterative design approaches to their work. Pupils learn about the capabilities of using CAD and CAM to make products
	Content	Knowledge: <ul style="list-style-type: none"> <li>Types of motion.</li> <li>Mechanism and levers.</li> <li>Knowledge of techniques used to shape and form materials.</li> </ul> Skills: <ul style="list-style-type: none"> <li>Use a range of machines and hand tools to create a passive amplifier.</li> <li>Safe drilling using the pillar drill and hand drill</li> <li>Use a jig to shape metal.</li> </ul>	Knowledge: <ul style="list-style-type: none"> <li>Types of fibres and their uses</li> <li>Knowledge of textile techniques; tacking, pattern making, seams, seam allowance.</li> <li>Knowledge of surface treatments and finishes.</li> </ul> Skills: <ul style="list-style-type: none"> <li>Develop and communicate ideas taking inspiration from the design movement.</li> <li>Develop own paper pattern.</li> <li>Use finishing techniques on a textile product.</li> </ul>	Knowledge <ul style="list-style-type: none"> <li>Knowledge of how to draw a 3D shape using one/two point perspective.</li> <li>How to research in order to inform a successful design.</li> </ul> Skills: <ul style="list-style-type: none"> <li>Precise marking out</li> <li>Develop and communicate ideas using annotated sketches, detailed plans and 3D drawings.</li> <li>Use modelling and prototyping to test the product considering the views of the intended users.</li> </ul>








YEAR 9 DT		AUTUMN	SPRING	SUMMER
	Assessment	MCQ (Forms) Practical Progress log Do now/Exit tickets Summative Assessment: 20-30 Nov	MCQ (Forms) Practical Progress log Do now/Exit tickets	MCQ (Forms) Practical Progress log Do now/Exit tickets Summative Assessment: 3-14 June
		Linear motion, Reciprocal motion Oscillating motion, Spur gears Linkages, Cam and follower Rack and pinion, Pulley system	Smart material, Thermochromic pigments, Photochromic pigments Graphene, Composite material 3D printing, Memory shape alloys Wet and dry paper, Tensile strength Compressive strength	Interfacing, applique, presser foot, tacking, seam allowance, natural fibres, synthetic fibres.
	CST	<p><b>Dignity of work</b> - Different job roles relating to Dt are discussed as we progress through the different projects.</p> <p><b>Rights and responsibilities</b> - Pupils are encouraged to take part in practical activities with an emphasis on taking care not to cause to compromise others safety. Take care to follow classroom rules, look after equipment and machinery in order to ensure others are able to use the equipment after them.</p> <p><b>Dignity of the human person</b> - Designing for others when making the phone stand</p>		



YEAR 9 DT		AUTUMN	SPRING	SUMMER
	Links to resource to support learning at home	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr9 Dt Knowledge Organiser	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr9 Dt Knowledge Organiser	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a> Yr9 Dt Knowledge Organiser

YEAR 9		AUTUMN	SPRING	SUMMER
Year 9	Overview	Food Safety and hygiene: Pupils further develop their knowledge of how to reduce the risk of bacterial multiplication and food poisoning.	Pupils will then research and investigate International cuisine focusing on a range of different cultures and how this influences their cuisine. Pupils will investigate and learn about ingredients used, cooking methods, eating patterns and how different regions can eat differently	Food provenance. Pupils will research and investigate different ways food can be grown, caught and reared. This will include investigations into intensive farming, free-range farming, organic farming and sustainable fishing.





YEAR 9		AUTUMN	SPRING	SUMMER
	Content	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> <li>• Conditions of bacterial growth</li> <li>• The 4C's</li> <li>• Types of food poisoning</li> <li>• Chemical, biological and physical hazards in a kitchen</li> </ul> <p><u>Practical:</u></p> <ul style="list-style-type: none"> <li>• Sweet and sour chicken: Sauce making, knife skills, hob</li> <li>• Beef burger and sauce: Knife skills, shaping, grilling, hand blender.</li> <li>• Jollof: Raw meat, hob control, knife skills</li> </ul>	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> <li>• Cultural food research: Traditional ingredients and dishes.</li> <li>• British cuisine</li> <li>• Design a food for an international festival</li> </ul> <p><u>Practical:</u></p> <ul style="list-style-type: none"> <li>• Fajitas: Frying, knife skills, seasoning.</li> <li>• Dutch apple cake: All in one, knife skills, baking, presentation</li> <li>• Samosa: QC Filo pastry, adjusting flavours, baking, mashing.</li> <li>• Festival food design</li> </ul>	<p><u>Knowledge:</u></p> <ul style="list-style-type: none"> <li>• Farming methods</li> <li>• Seasonality of foods</li> <li>• Food production and preservation</li> </ul> <p><u>Practical:</u></p> <ul style="list-style-type: none"> <li>• Tiramisu: Infusing flavours, presentation.</li> <li>• Shortcrust pastry: Rubbing in, rolling out, sealing and glazing.</li> <li>• Fruit Jalousie: Flaky pastry, rolling out, presentation, glazing.</li> </ul>
	Key vocab	Binary Fission, Temperature danger zone, Dormant, Temperature probe Cross contamination, Pathogen HACCP, High risk foods, The 4 C's Bacteria	Cooking Methods, Cuisine, Culture Tenderise, Marinade, Glaze, Quality Control, Finishing techniques Garnish, Dough	Seasonal foods, Environment, Food Provenance, Reared Intensive Farming, Free Range Farming Organic, Sustainable, Locally Sourced Food Miles
	Links to previous learning	Pupils are shown how to develop existing practical skills into more complex and high skilled tasks and techniques, with a high quality finish. This will broaden their skills in areas such as knife skills through the introduction of 'julienne' and quality control when preparing vegetables. Therefore developing the knife skills that have been used in year 8 to dice and slice vegetables. The continuation of skills whilst working with pastry and bread dough, to introduce other cooked elements to the dish. Therefore requiring pupils to consider dovetailing tasks and time management more effectively. Research tasks will allow pupils to develop their independent research skills and apply their findings to their inform design work: which will develop and underpin the research skills used in year 8 when investigating and researching nutritional needs of different life stages.		

YEAR 9		AUTUMN	SPRING	SUMMER
	    	<p><b>Solidarity and the common good</b> – Pupils investigate different cultural and religious foods and are taught to be respectful to these traditions.</p> <p><b>Dignity of the human person/ Family and community</b> – Pupils continue to develop their knowledge of how to reduce the risk of harmful bacteria when cooking for others.</p> <p><b>Stewardship</b> – Pupils investigate the how to reduce food waste and impact of food provenance on the global environment.</p> <p><b>Option for the poor and venerable</b> - Pupils are encouraged to participate in all practical tasks, funds are accessed so practical activities are inclusive and affordability is not a barrier</p> <p><b>Family and Community</b> –. Recipes are carefully selected to ensure the a affordable to all. Pupils are taught to cook healthy and nutritional dishes for others.</p>		
	Links to future learning	This provides students with the breadth of knowledge and skills necessary to understand the key aspects relating to preparing, combining and shaping ingredients and applying food science knowledge in a practical context. This will embed a foundation of knowledge and understanding for future learning when pupils embark on GCSE Food Preparation and Nutrition, whereby pupils will investigate shortening, plasticity, aeration, ingredient choice and will require a more in depth application of knowledge which is taught in year 10 Food Preparation and Nutrition.		
	Why this now?	Pupils have by now been equip an understanding of the functional properties of ingredients and they can use the technical terminology to explain how and why ingredients respond the way they do when prepared and cooked. Pupils have the opportunity to further develop their practical skills linking in more complex skills with the addition of dove tailing the task while planning.		
	Assessm ent	Exit tickets Live marking Multiple choice questions (Forms) Summative Assessment: (1) 20-30 Nov (2) 3-14 June		

YEAR 9		AUTUMN	SPRING	SUMMER
	Links to resource to support learning at home	<a href="https://www.foodafactoflife.org.uk/11-14-years/">Food and health www.foodafactoflife.org.uk/11-14-years/</a>		

YEAR 10 CDP		AUTUMN	SPRING	SUMMER
Year 10	Overview	<b>Design and production in context</b> <b>Design materials and processes</b> <b>Mirror project.</b> The learner will understand design movements from 1860 to the present day, the key design principles and the impact of environmental and social factors on the production processes for a design outcome.	<b>Design brief and production processes</b>  The learner will understand the importance of working in response to design brief requirements. They will understand design proposals and how these are created. The learner will also understand the importance of communication skills and modification of a design solution in response to feedback.	<b>Presentation of a design solution</b> <b>Lighting Project</b>

Content	<p><b><u>Knowledge:</u></b> Design movements (Arts and Crafts, Bauhaus, Modernism, Memphis, Post modern)</p> <ul style="list-style-type: none"> <li>• Key social factors</li> <li>• Key features</li> <li>• Key designers</li> </ul> <p>Key design principles, good design and the function and aesthetics of design.</p> <p>Pupils will understand that designs can be made with a range of materials: textiles, papers, card and board. Wood, plastics, metals and smart materials. Properties and characteristics.</p> <p>The learner will understand risk management and health and safety requirements when working in design production disciplines, to include personal protective equipment (PPE) at work</p> <p><b><u>Practical Skills:</u></b></p> <ul style="list-style-type: none"> <li>• CAD/CAM to make the mirror</li> <li>• Cutting and shaping timber and metal, routed edge.</li> <li>• Drill and Form aluminium bar</li> <li>• Thread metal bar.</li> </ul>	<p><b><u>Knowledge:</u></b> Understand different elements of a design brief, to include interpreting key information, types of client and client needs. The stages of the design solution process and how the design solution is presented.</p> <p>Develop communication skills understand the importance of effective communication skills that can be used when presenting a design solution in response to a design brief, to include client, graphical and digital communication skills.</p> <p>Use different types of feedback to modify design solutions.</p> <p>Digital design and manufacture processes and techniques, to include computer-aided design (CAD) and computer-aided manufacture (CAM).</p> <p>Impact of design on the environment. Product Lifecycle Practical skills: Trinket box: laser cutting, rebate joint, comb joint, attach standard components, surface finish. Phone stand: CAD/CAM. Cutting, shaping drilling plastic and timber.</p>	<p><b><u>Knowledge:</u></b> <b>Pupils research, design and make a lighting product for a client.</b></p> <p>Understand different elements of a design brief, to include interpreting key information, types of client and client needs. The stages of the design solution process and how the design solution is presented.</p> <p>Develop communication skills understand the importance of effective communication skills that can be used when presenting a design solution in response to a design brief, to include client, graphical and digital communication skills.</p> <p>Use different types of feedback to modify design solutions.</p> <p>The learner will understand the purpose of production planning, its stages, and budget requirements:</p>
---------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

YEAR 10 CDP		AUTUMN	SPRING	SUMMER
	Assessment	Formative Assessments Practical Progress log during each practical task. Knowledge Check Assessment NCFE Content area 1	Formative Assessments Summative Assessment Jan Practical Progress log during each practical task. Knowledge Check Assessment NCFE Content Area 2	Formative Assessments Practical Progress log during each practical task. Knowledge Check Assessment NCFE Content Area 3
	CST	<p><b>Dignity of work</b> - Different job roles relating to Dt are discussed as we progress through the different projects. Pupils consider in greater depth contextualised learning investigating the advantages and disadvantages of CAD/ACAM and automation on the jobs. </p> <p><b>Family and community/Right and responsibility</b> - Pupils are encouraged to take part in practical activities with an emphasis on taking care not to cause to compromise others safety. Take care to follow classroom rules, look after equipment and machinery in order to ensure others are able to use the equipment after them. </p> <p><b>Solidarity of the common good</b> - Exploration of solidarity and community when exploring different cultures and design movements and being respectful of these when designing their own products. Pupils investigate how to community can play a role in investing in products e.g. (Crowd funding) that can serve society. </p> <p><b>Stewardship</b> - Pupils investigate the how the environment is impacted by how a designer designs a product considering the product life cycle. </p>		








YEAR 10 CDP		AUTUMN	SPRING	SUMMER
	Key vocab	Design sector Design movement Bauhaus Art deco Isometric drawing Two-point perspective CAD CAM Design principles Aesthetics	Surface finishes, surface treatments, graphical communication, environmental impact, social factors, quality control, quality assurance, orthographic drawing, design process	Primary research, secondary research, specification, development of ideas, prototyping, testing, modifying, PPE, risk assessment, control measures.
	Links to prior learning	The knowledge and skills developed in KS3 and the prior learning in year 10 relating to building skills in research, design, knowledge of technical properties and link to this unit.		
	Links to future learning	This learning will further allows for the embedding of core and specialist principles along with enough breadth of knowledge to embark on generating and developing creative ideas.		
	Why this now	Pupils will learn about a range of manufacturing techniques and components at this time in order to establish a secure knowledge of processes available in industry.		

YEAR 10 CDP		AUTUMN	SPRING	SUMMER
	Links to resource to support learning at home	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a>	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a>	BBC Bitesize <a href="http://www.technologystudent.com">www.technologystudent.com</a>

		AUTUMN	SPRING	SUMMER
Year 10 V Cert Food and Cookery	Overview	<b>Health and safety relating to food Food legislation.</b> In this unit pupils will learn about basic food safety and safe and hygienic food preparation. In order to ensure food and cookery practice is as safe and hygienic as possible pupils investigate the importance in following the current food safety legislation guidelines. In this unit pupils will learn how and why the Food Standards Agency was created in the UK and what it does to protect consumers. Pupils will learn about the laws that all food handlers, producers and sellers follow.	<b>Food Provenance</b> In this unit pupils will learn about where the food comes from, how it is grown, reared or caught and how it is transported safely. There is information about food processing and manufacturing and the advantages and disadvantages of both of these.	<b>Food groups, key nutrients and a balanced diet</b> <b>Factors effecting food choice</b> In this chapter build on their knowledge of the Eatwell Guide and the food groups. Pupils will learn what a balanced diet looks like and the nutrients that are needed for healthy growth and maintenance of the body. Pupils will investigate the nutritional requirements for different people and how some people have food-related health conditions. This unit also investigates how to read and interpret the nutritional labelling.

	<p><b>Content</b>    <b>V Cert Food and Cookery</b></p>	<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>• Safe and hygienic working practices relating to the individual and the cooking environment.</li> <li>• Potential hazards and risks in the cooking environment.</li> <li>• Hazard Analysis and Critical Control Point (HACCP).</li> <li>• Minimising risk in the cooking environment.</li> <li>• Safe and hygienic working practices when using cooking equipment and utensils.</li> </ul> <p><b><u>Skills:</u></b></p> <ul style="list-style-type: none"> <li>• Demonstrate safe working practices while carrying out practical tasks</li> <li>• Recognise potential hazards in the kitchen and how to minimise them.</li> <li>• Explain critical control points in a HACCP plan</li> <li>• Produce a risk assessment</li> <li>• Opportunity for practical experience:</li> <li>• Lasagne (fresh pasta) Thai Chicken curry, Risotto, Burger and wedges, Quiche, Fajita skewers, chicken and cauliflower tikka bites.</li> </ul>	<p><b><u>Knowledge:</u></b></p> <ul style="list-style-type: none"> <li>• Where food comes from: How food is grown, and how it is reared and caught.</li> <li>• How food is transported and the health and safety requirements during transportation.</li> <li>• How and why food is processed, and the advantages and disadvantages of processed food.</li> <li>• Food manufacturing: Why food is manufactured, and the advantages and disadvantages of manufactured food.</li> <li>• Information on the different food groups in the Eatwell Guide</li> <li>• The components of a balanced diet</li> <li>• The sources and functions of the different nutrients</li> <li>• Nutrient imbalances: What happens if we do not eat enough of a key nutrient</li> <li>• The role of fibre in our diet</li> <li>• The nutritional requirements or different groups of people</li> <li>• Food-related health conditions</li> </ul>	<p><b>Knowledge:</b></p> <p>Introduction to the social factors that affect food choice, including cultural factors, locality, accessibility factors and personal as well as economic factors, and how these may affect the choice of food to maintain a balanced diet. How food growth, rearing, catching, processing and manufacture affects the environment, including food miles, carbon footprint, use of pesticides and how this can affect our choice of food</p> <p>Information about the seasonality of food and how food can be most efficiently grown. Introduction to seasonal foods in the UK and which fruits and vegetables are available at different times of the year. The benefits of using seasonal food, including nutritional values, flavour, price, availability, cost and reducing food miles.</p> <p>This unit will consolidate learning experienced in practical skills in order to understand the key stages of a recipe, the function of each ingredient, the correct preparation skill and</p>
--	---------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		AUTUMN	SPRING	SUMMER
			<ul style="list-style-type: none"> <li>Nutritional information on food labels.</li> </ul>	how to achieve attractive presentation.
	Assessment	<p>Practical assessment of skills and presentation Summative Assessment: Feb Do Now each lesson MCQ (Forms) Knowledge tests Exam style questions Content Area 1 NCFE Test</p> <p>Students complete practise exam style questions throughout the year to ensure that they are confident in the structure of their answers, and to check for understanding.</p>	<p>Practical assessment of skills and presentation Summative Assessment: Feb Do Now each lesson MCQ (Forms) Knowledge tests Exam style questions Content Area 2 NCFE Test Summative assessment Jan 24</p> <p>Students complete practise exam style questions throughout the year to ensure that they are confident in the structure of their answers, and to check for understanding.</p>	<p>Practical assessment of skills and presentation Summative Assessment: Feb Do Now each lesson MCQ (Forms) Knowledge tests Exam style questions Content Area 3 NCFE Test Summative assessment.</p> <p>Students complete practise exam style questions throughout the year to ensure that they are confident in the structure of their answers, and to check for understanding.</p>

		AUTUMN	SPRING	SUMMER
	    	<p><b>Solidarity and the common good</b> – Pupils are continued to be encouraged to look after equipment and leave the practical area in a way that is respectful to others using the area after them.</p> <p><b>Dignity of the human person/ Family and community</b> – Pupils continue to develop their knowledge of how to reduce the risk of harmful bacteria when cooking for others. Pupils are taught about different job roles and FE courses associated with the food industry</p> <p><b>Stewardship</b> – Pupils investigate the how to reduce food waste and impact of food provenance has on the global environment. Fairtrade and the reduction of food miles by using seasonal and local food are investigated</p> <p><b>Option for the poor and venerable</b> - Pupils are encouraged to participate in all practical tasks, funds are accessed so practical activities are inclusive and affordability is not a barrier</p> <p><b>Family and Community</b> –. Recipes are carefully selected to ensure they are affordable to all. Pupils are taught to cook healthy and nutritional dishes for others sector of society.</p>		
	Key vocab	Contamination Food poisoning Personal hygiene Cross-contamination: Physical contamination Chemical Contamination Biological Contamination The 4Cs HACCP Risk assessment	Food safety legislation, Food provenance, food processing, grown, caught, reared, food manufacturing, seasonality, environmental factors	Macronutrients, micronutrients, minerals, intolerances, allergies, food labelling, nutrient imbalances, UK government healthy eating tips, seasonality, hydration.
	Links to prior learning			

		AUTUMN	SPRING	SUMMER
	Links to previous learning			
	Links to resource to support learning at home	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize






YEAR		AUTUMN	SPRING	SUMMER
Year 10 – FPN GCSE	Overview	Food, nutrition and health Planning, preparing and cooking a balanced meal for a specific dietary need. Sensory testing and evaluation Food spoilage and contamination	Functional and Chemical properties of ingredients. Functional and chemical properties of food NEA1 style investigation: Enzymic browning	NEA2 style project: Designing Street food Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task.

YEAR 10 FPN		AUTUMN	SPRING	SUMMER
Year 10 – FPN GCSE	Overview	Food, nutrition and health Planning, preparing and cooking a balanced meal for a specific dietary need. Sensory testing and evaluation Food spoilage and contamination	Functional and Chemical properties of ingredients. Functional and chemical properties of food NEA1 style investigation: Enzymic browning	NEA2 style project: Designing Street food Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task.

	<b>Content</b>	<p>Investigate LBV and HBV protein, protein complementation. Know and understand the effects of an excess and deficiency of protein in the diet.</p> <p>Know and understand the chemical structure of fat.</p> <p>Investigate different types of fat and how this effects health. Know and understand the effects of an excess and deficiency of fat.</p> <p>Investigate and learn the different types of carbohydrate: sugars and complex carbohydrates. Know and understand the effects of an excess and deficiency of carbohydrate. Investigate and analyse the effects of cooking on vitamins. Know and understand the function of a range of vitamins and minerals and the effect of a deficiency and excess for each one. Learn how to carry out a nutritional analysis. Analyse and evaluate a nutritional analysis. Know and understand the importance of water in the diet.</p> <p>Learn and know how dietary guidelines enable people to plan</p>	<p>Investigate, learn how carbohydrates react to food preparation processes and cooking methods. Learn and demonstrate dextrinization and caramelisation</p> <p>Investigate and learn the functional and chemical properties of fat including how they react to food preparation processes and cooking methods. Learn, know and demonstrate plasticity, shortening, emulsification and aeration.</p> <p>Learn and know the signs of food spoilage: moulds, enzymes and yeast. Investigate and learn how micro-organisms can spoil food and make it unsafe to eat and how enzymes can spoil the palatability of food.</p> <p>Students will understand the working characteristics, functional and chemical properties of ingredients related to the task. They will know and understand how enzymic browning occurs and ways to prevent it.</p>	<p>Pupils will investigate, know and apply knowledge on the reasons why food is cooked. Learn and know the different methods of transferring heat to food: Convection, conduction and radiation. Investigate and analyse how different cooking methods affect the appearance, palatability and nutritional content of food.</p> <p>Investigate the primary and secondary stages of food processing and production.</p> <p>Students will know and understand how to research and analyse a task. Students will know how to competently execute a range of technical skills and processes that lead to appropriate and justified final dishes. They will know and understand how to apply safe working practices in planning and practical work. Students will have learnt, developing knowledge of the different technical skills and applied this to practical tasks. Students will have knowledge and understanding of planning, dovetailing where appropriate and time management, this will be applied to their work. Pupils will demonstrate</p>
--	----------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------








YEAR 10 FPN		AUTUMN	SPRING	SUMMER
		balanced meals. Apply knowledge to planning, preparing and cooking a balanced meal with applied nutritional knowledge and understanding.		knowledge and understanding of how to carry out sensory evaluation, analyse and evaluate results to identify improvements to their dishes. Students will know how to select and use the correct equipment for different technical skills in the preparation and cooking of selected dishes. Pupils will demonstrate food safety principles for storing, preparing and cooking a range of ingredients and dishes suitable for the task.
	Assessment	Practical assessment of skills and presentation Do Now each lesson MCQ (Forms) Knowledge tests Exam style questions Summative assessment.	Summative Assessment: Jan Practical assessment of skills and presentation Do Now each lesson MCQ (Forms) Knowledge tests Exam style questions Summative assessment.	Summative Assessment: June Practical assessment of skills and presentation Do Now each lesson MCQ (Forms) Knowledge tests Exam style questions Summative assessment.

YEAR 10 FPN		AUTUMN	SPRING	SUMMER
	Key vocab	High Biological Value Protein Low Biological Value Protein Deficiency Excess Starchy Carbohydrate Nutritional Analysis Micro-organisms Dovetail Garnish Aeration	Dextrinisation Caramelisation Raising agents Gelatinisation Bacterial contamination Pathogenic Spores Danger zone Emulsification Shortening	Palatability Nutritional profiling Food Labelling Mandatory Food Marketing Food allergy Traffic Light System Food intolerance Religious Dietary Laws Ethical and Moral beliefs
	    	<p><b>Solidarity and the common good</b> – Pupils are continued to be encouraged to look after equipment and leave the practical area in a way that is respectful to others using the area after them.</p> <p><b>Dignity of the human person/ Family and community</b> – Pupils continue to develop their knowledge of how to reduce the risk of harmful bacteria when cooking for others. Pupils are taught about different job roles and FE courses associated with the food industry</p> <p><b>Stewardship</b> – Pupils investigate the how to reduce food waste and impact of food provenance has on the global environment. Fairtrade and the reduction of food miles by using seasonal and local food are investigated</p> <p><b>Option for the poor and venerable</b> - Pupils are encouraged to participate in all practical tasks, funds are accessed so practical activities are inclusive and affordability is not a barrier</p> <p><b>Family and Community</b> –. Recipes are carefully selected to ensure they are affordable to all. Pupils are taught to cook healthy and nutritional dishes for others sector of society.</p>		
	Links to prior learning	<p>Pupils will embed and develop knowledge and skills from KS3 relating to food spoilage and contamination in order to expand on this throughout the sequence of lessons.</p> <p>The learning in this unit calls upon previous knowledge in year 8 where pupils establishing knowledge of the functional properties of ingredients, the sequence of lessons throughout the curriculum allows pupils to build their understanding in order to experience success in this unit.</p>		

YEAR 10 FPN		AUTUMN	SPRING	SUMMER
	Links to future learning	This unit is included at this point to further develop the practical skills, alongside knowledge of a range of ingredients that will assist pupils when completing all 3 assessed units for this qualification. It also allows pupils to prepare for NEA1 in the September of year 11 which is worth 15% of their final grade.		
	Why	Pupils are given the opportunity within this unit to further depth and breadth of knowledge relating to diet and health. Building on established learning for KS3, pupils will have a strong understanding of nutrition and be able to make links between theory and practice to apply their understanding of food and nutrition to practical preparation. This unit of work allows pupils to develop their knowledge and understanding of how applying cooking methods effects the working characteristics functional and chemical properties of nutrients in ingredients when preparing and cooking foods in a safe and hygienic manner. This unit of work allows pupils to develop their knowledge and understanding of how applying cooking methods effects the working characteristics functional and chemical properties of nutrients in ingredients when preparing and cooking foods in a safe and hygienic manner.		
	Links to resource to support learning at home	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize Seneca	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize Seneca	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize Seneca

		AUTUMN	SPRING	SUMMER
Year 11 GCSE Food and Cookery V Cert	Overview	chnology <b>NEA Delivery</b>	<b>Exam Preparation NEA Delivery</b>	<b>Exam Preparation</b>
	Content	<p><b><u>Unit 02 Developing preparation and cooking skills</u></b></p> <p>This unit looks at how to prepare and plan for food and cookery. Pupils will learn about recipes, the functions of ingredients and how to amend and develop recipes. Pupils will learn about how to prepare dishes for different people and occasions and how to respond to a set brief, including how to create accurate time plans. Pupils will learn how to review and evaluate their menu, planning, preparation and completed dishes.</p> <p>Recipe amendment, development, and evaluation</p> <p>Recipe amendment.</p> <p>Amending and developing recipes</p> <p>Evaluating completed dishes</p> <p><b>NEA Title Release</b></p>	<p><b>NEA Delivery:</b> The non-exam assessment will assess the learner's ability to effectively draw together their knowledge, understanding and skills from across the whole vocational area. The non-exam assessment will target assessment objectives.</p> <p>Interpreting a customer brief. Menu planning. Action planning. Evaluate the planning and outcome of completed dishes against the requirements of a customer brief.</p> <p>Examined Unit Revision</p>	<p>Examined Unit Revision</p> <p>Revise content areas:</p> <ul style="list-style-type: none"> <li>• Health and safety relating to food, nutrition and the cooking environment</li> <li>• Food legislation and food provenance</li> <li>• Food groups, key nutrients and a balanced diet</li> <li>• Factors affecting food choice</li> </ul>
	Assessment	<p>Summative Assessment: Jan</p> <p>Practical assessment of skills and presentation</p> <p>Do Now each lesson</p> <p>MCQ (Forms)</p> <p>Knowledge tests</p>	<p>Summative Assessment: Jan</p> <p>Practical assessment of skills and presentation</p> <p>NEA Progress Tracker</p> <p>Do Now each lesson</p> <p>MCQ (Forms)</p>	<p>Summative Assessment</p> <p>Practical assessment of skills and presentation</p> <p>Do Now each lesson</p> <p>MCQ (Forms)</p> <p>Knowledge tests</p>

		AUTUMN	SPRING	SUMMER
		Exam style questions Summative assessment.	Knowledge tests Exam style questions Summative assessment.	Exam style questions Summative assessment.
	Key vocab	Aeration, gelatinisation, shortening, setting, aesthetics, rubbing in, creaming, marinating, basting, blanching, recipe amendment.	Activity level, occasion, sensory factors, customer brief, menu planning, Action planning, dovetailing, evaluation,	
	Links to prior learning	Pupils draw upon their knowledge of adapting recipes for different nutritional need from year 8 and 10 in this section of their NEA portfolio. Title provided by the exam board in Sept. Pupils demonstrate a range of technical skills which have been developed throughout KS3 and 4		
	    	<p><b>Solidarity and the common good</b> – Pupils are continued to be encouraged to look after equipment and leave the practical area in a way that is respectful to others using the area after them.</p> <p><b>Dignity of the human person/ Family and community</b> – Pupils continue to develop their knowledge of how to reduce the risk of harmful bacteria when cooking for others. Pupils are taught about different job roles and FE courses associated with the food industry</p> <p><b>Stewardship</b> – Pupils investigate the how to reduce food waste and impact of food provenance has on the global environment. Fairtrade and the reduction of food miles by using seasonal and local food are investigated</p> <p><b>Option for the poor and venerable</b> - Pupils are encouraged to participate in all practical tasks, funds are accessed so practical activities are inclusive and affordability is not a barrier</p> <p><b>Family and Community</b> –. Recipes are carefully selected to ensure they are affordable to all. Pupils are taught to cook healthy and nutritional dishes for others sector of society.</p>		

		AUTUMN	SPRING	SUMMER
	Links to future learning	This qualification links to several FE courses relating to food and catering. See Hopwood Hall courses		
	Links to resource to support learning at home	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize	<a href="http://www.foodafactoflife.org.uk/14-16-years/">www.foodafactoflife.org.uk/14-16-years/</a> BBC Bitesize

Curriculum Map – Technology  
2023/24



YEAR 11 CDP	AUTUMN	SPRING	SUMMER
-------------	--------	--------	--------

Year 11 V Cert Creative Design and Production	Overview	<p>Memphis Lamp Project: Purposes of presentation Methods of presentation Presentation skills for a design solution Developing Design Ideas Realising Design Ideas Analyse and evaluate 5.1 Formative review of design process and production</p> <ul style="list-style-type: none"> <li>•Aspects of the design process to be reviewed:</li> <li>•Defining the need of a product.</li> <li>• Research.</li> <li>• Initial ideas.</li> <li>• Prototyping.</li> <li>• Testing.</li> <li>• Redesigning.</li> <li>•Aspects of production to be reviewed:</li> <li>•Production methods.</li> <li>•Production process.</li> <li>•Production techniques.</li> </ul> <p>5.2 Summative review of design solution</p> <ul style="list-style-type: none"> <li>•Design principles.</li> <li>•Design process.</li> <li>•Meeting the needs of the brief:</li> <li>•Functionality of product.</li> </ul>	<p>NEA: Realisation of design ideas Further Development Evaluation of outcome</p> <p>Exam Content: ALL Units (revision will commence as soon as all four topics are completed.) School Policy is that we finish the curriculum by February half-term.</p> <p>Pupils will secure the depth and breadth of knowledge in preparation for the Paper 1 assessment. Knowledge and skills relating to;</p>	<p>Developments in new materials</p> <p>Throughout this unit pupils will focus on developing their skills of revising using a range of techniques that have been ongoing throughout the V Cert course. Pupils will revise and practice the skills of answering exam questions on industrial practices, developments in industry using a range of exam style questions, with feedback given through self-assessment, peer assessment and teacher assessment. Pupils will focus on the skill of reading and interpreting questions and the importance of proof reading answers.</p>
-----------------------------------------------	----------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------












YEAR 11 CDP		AUTUMN	SPRING	SUMMER
		<ul style="list-style-type: none"> <li>•Suitability for target audience.</li> <li>•Usability/performance.</li> <li>•How challenges faced were resolved.</li> <li>•Future developments/modifications.</li> <li>•Lessons learnt.</li> </ul> <p>Exam content:</p> <p>6 Working in the design production industries</p> <p>6.1 Employment and career opportunities and skills in the design production industry</p> <p>6.1.1 Employment and career opportunities</p> <p>6.1.2 Skills for the design production industry</p> <p>6.2 Product promotion</p> <p>6.3 Self-promotion</p>		

YEAR 11 CDP		AUTUMN	SPRING	SUMMER
	Content	<p>Interpreting a design brief NEA</p> <p>This content area will ensure learners understand the importance of working in response to design brief requirements. Pupils will investigate the different elements of a design brief, how to interpret key information, and understand the different types of client and client needs.</p>	<p>4.1 Purposes of presentation, 4.2 Methods of presentation and 4.3 Presentation skills for a design solution.</p> <p>5.1 Formative review of design process and production and 5.2 Summative review of a final design solution</p> <p>Exam Preparation</p>	
	Assessment	<p>Formative Assessment Exam Q</p> <p>Knowledge Checks</p> <p>Do now/Exit tickets</p> <p>NEA Progress checker</p>	<p>Formative Assessment Exam Q</p> <p>Knowledge Checks</p> <p>Do now/Exit tickets</p> <p>NEA Progress checker</p> <p>Mock Jan 24</p>	<p>Formative Assessment Exam Q</p> <p>Knowledge Checks</p> <p>Do now/Exit tickets</p> <p>NEA Progress checker</p> <p>Practice exam papers</p>

YEAR 11 CDP		AUTUMN	SPRING	SUMMER
	CST	<p><b>Dignity of work</b> - Different job roles relating to Dt are discussed as we progress through the different projects. Pupils consider in greater depth contextualised learning investigating the advantages and disadvantages of CAD/ACAM and automation on the jobs.</p> <p><b>Rights and responsibilities</b> - Pupils are encouraged to take part in practical activities with an emphasis on taking care not to cause to compromise others safety. Take care to follow classroom rules, look after equipment and machinery in order to ensure others are able to use the equipment after them.</p> <p><b>Solidarity of the community</b> - Exploration of solidarity and community when exploring different cultures and design movements and being respectful of these when designing their own products. Pupils investigate how to community can play a role in investing in products eg (Crowd funding) that can serve society.</p> <p><b>Stewardship</b> - Pupils investigate the how the environment is impacted by how a designer designs a product considering the product life cycle.</p>		
	Key Vocab	Digital marketing, promotional methods, physical marketing, Self-promotion, portfolio, design solution, costings, design brief, design proposal, design solution	Budget, timeline, modification, feedback, time management, production stages, material waste, contingency, production methods, production plan, summative review.	
	Links to prior learning	The knowledge and skills developed in KS3 and the prior learning in year 10 relating to building skills in research, design, knowledge of technical properties and link to this unit.		

YEAR 11 CDP		AUTUMN	SPRING	SUMMER
	Links to future learning	This learning will further allows for the embedding of core and specialist principles along with enough breadth of knowledge to embark on generating and developing creative ideas.		

		Autumn	Spring	Summer
Year 11	Theme	<p>Exam Focus: Food Provenance and healthy eating guidelines. NEA1 Investigation task (15%) Exam topic based on investigation focus Sensory Evaluation</p>   	<p>NEA 2 task (35%) Exam focus: Food choice Microorganisms and enzymes</p>   	<p>Food Labelling Bacterial Contamination General Revision</p>   
	Knowledge / skills	<p><b>NEA Titles released 1<sup>st</sup> Sept</b> <b>NEA 1 Knowledge:</b> Food investigation assessment NEA 1 Students will have an understanding of the working characteristics, functional and chemical properties of ingredients related to their chosen task. They will know and understand how certain ingredients work.</p>	<p>They will know and understand how to apply safe working practices in planning and practical work. Students will have knowledge of the different technical skills. Students will have knowledge of planning, dovetailing where appropriate and time management. Knowledge of how to carry out sensory evaluation and identify improvements to their dishes.</p>	<p><b>Knowledge:</b> Students will know the compulsory and non-compulsory information needed on food packaging. They will know the purpose of nutritional labelling and how it is presented on food packaging. Students will have knowledge of food Marketing and how it influences food choice. Revision lessons will compromise of areas highlighted by staff and students for revision and will</p>

	<p>Students will know how to research, reference and present concise and relevant research related to a task. Alongside this, students will know to carry out a range of appropriate testing methods and how to record the results e.g. annotated photographs, labelled diagrams, tables, charts, sensory testing methods, viscosity tests. A knowledge of how to interpret and analyse results of investigative work.</p> <p><b>Unit 1 Knowledge:</b></p> <p>Pupils will understand that ingredients are reared, grown or caught. 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> <p>Pupils will investigate the current guidelines for a healthy diet.</p>	<p>Students will know how to select and use the correct equipment for different technical skills in the preparation and cooking of selected dishes. Knowledge of food safety principles for storing, preparing and cooking a range of ingredients and dishes suitable for the task. Pupils will know how a range of factors can impact on food choice</p> <p><b>Skills:</b></p> <p>Pupils will be able to apply their knowledge of factors that impact on food choice and apply this to exam questions. Pupils will develop their independent researching skills and be able to choose appropriate research methods for their chosen task. Pupils will select high skilled dishes appropriate for their task to demonstrate a range of technical skills. Pupils will produce clear, logical and accurate plans for their 3 final dishes which will include all of the stages of making, including appropriate timings, reference to food safety, with appropriate dovetailing. Students will apply all previous knowledge and understanding to produce 3 high skilled dishes under</p>	<p>cover topics/knowledge previously studied.</p> <p><b>Skills:</b></p> <p>Throughout this unit pupils will focus on developing their skills of revising using a range of techniques that have been ongoing throughout the GCSE course. Pupils will revise and practice the skills of answering exam questions for food preparation and nutrition using a range of exam style questions, with feedback given through self-assessment, peer assessment and teacher assessment. Pupils will focus on the skill of reading and interpreting questions and the importance of proof reading answers.</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p>Food choice related to religion, culture, ethical and moral beliefs and medical conditions.</p> <p>Pupils investigate the primary and secondary stages of processing and production. How processing affects the sensory and nutritional properties of ingredients.</p> <p><b>Skills:</b> Pupils will carry out a range of practical testing, Carry research relevant and concise research relating to the task. Record data and interpret results</p>	<p>exam conditions in a kitchen. Pupils <b>will use their knowledge and understanding of sensory testing and evaluation</b> to record and analyse the sensory properties (taste, texture, aroma and appearance) of the three final practical dishes. Pupils will then independently carry out a nutritional analysis of the three final dishes, and analyse the cost of the three final dishes.</p>	
	<b>Rationale</b>	<p><b>Links to Previous Learning</b> The curriculum planning prepares pupils for this unit of work by equipping them with breadth of knowledge of ingredients, nutrition diet and health and practical skills required to undertake the NEA requirements.</p> <p><b>Links to Future Learning</b></p>	<p><b>Links to Previous Learning</b> Previous learning from the curriculum relating to diet health and nutrition will response to the nutritional requirements of a range of dietary needs</p> <p><b>Links to Future Learning</b> Pupils will be prepared for the next as this unit will broaden their knowledge of functional properties of ingredients,</p>	<p><b>Links to Previous Learning</b> <b>Learning will enable pupils to secure and embed the knowledge established earlier in the curriculum to answer exam questions.</b></p> <p><b>Links to Future Learning</b> Pupils will be prepared for further education or employment with the skills and knowledge established</p>

	<p>Pupils will be prepared for the next as they will be equipped with the skill and knowledge to prepare health balanced meals for a range of nutritional requirements.</p> <p><b>Why</b> NEA1 is the first Non Examined Assessment and is released on 1<sup>st</sup> September by AQA. It is worth 15% of the student's final grade and is a food investigation task. Students are prepared for this task through food investigations throughout key stage 3 and 4 looking at the functional and chemical properties of foods. The specific learning for this task will depend upon the task title chosen but will inform exam preparation and revision as students through the task develop their understanding of the working characteristics, functional and chemical properties of ingredients.</p>	<p>technical skills as well as refine their culinary skills producing complex dishes.</p> <p><b>Why</b> NEA2 allows pupils to apply all prior learning to a task given by the exam board. This Non Examined Assessment is 35% of the student's final grade and includes a 3 hour practical exam. Pupils' prior learning and all practical work including more independent, complex tasks in Year 10 are preparing pupils for this task. The task allows for exam preparation through food provenance, functions of ingredients, nutritional analysis and knowledge also.</p>	<p>throughout the curriculum allowing for a firm foundation to enter into A Level Food and Nutrition, Catering or Hospitality.</p> <p><b>Why</b> Pupils need to revise in preparation for their final exam that is worth 50% of their final grade. This links to all prior learning and will focus on knowledge building and areas pupils and teachers identify as areas needed for revision.</p>
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------