

## Curriculum Intent - Design Technology

### Key Stage 3: Year 7 RM

Overall Curriculum Goals					
To understand and be able to produce a product to a given drawing.					
To be able to work safely and accurately using a range of workshop tools and equipment.					
To understand how to realise design concepts from different material areas, with increased precision, accuracy and independence.					
To understand basic theory topics for the 3 main material areas					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Brahma Puzzle. To include; Health and safety of the majority of machines, tools and equipment. The cutting, sanding, drilling and marking of pine. The marking, cutting, filing and finishing of Foamex.	Plastic Award project and packaging To include; Researching, designing and manufacture of Foamex shape, building on skills from Brahma Puzzle; template making, cutting, filing and finishing of Foamex. Graphics and finishing of paper packaging, using a simple net.	Electronic Toy and packaging. To include; Research and initial design ideas. Final design ideas with consideration for bought-in component. MIB work for presentation of design ideas.	Electronic Toy and packaging. To include; Simple electronic theory and soldering of components. Pattern making, felt cutting, embellishment and assembly.	Keyring and Packaging. To include; Research and design of keyrings. Manufacture of keyring to include; cutting, filing and finishing of aluminium. The marking and drilling of metal. The graphical design of packaging, building on the work completed on the Plastic Award and Electronic Toy.	Pencil topper and EoY Exam. To include; Exam preparation lesson and EoY exam, covering all areas covered across the year. The pencil topper will include; researching and design personalised shapes. The cutting, filing and finishing of plywood. The assembly of plywood and other wood types.
Health and safety theory and test.	Woods theory and test.	Plastics theory and test.	Electronics theory and test.	Metals theory and test.	EoY Exam.
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
Pine, Foamex, PVA glue, pillar drill, try-square, steel rule, tenon saw, Hegner saw, flat file, vice, dowel, wet and dry paper, evaluation, success criteria. Health and safety including; guards, extraction, safety box, safety glasses, apron.	Design Ideas Concept sketching Peer assessment. Research image board. Presentation drawing. Final outcome including; coping saw, junior hacksaw, variety of file shapes, wet and dry, wire wool. Evaluation Plastics theory	Design Ideas. Concept sketching. Presentation drawing and rendering. Template/pattern. Embellishment/decoration. Stitching types. Assembly.	Soldering, PCB, LED, resistor, toggle switch, battery. Graphics, nets, packaging, text/fonts, logos. Final outcome. Packaging net. Evaluation.	Aluminium, pillar drill, centre-punch, scribe, deburr. Specific material names and processes as required by project outcomes	Plywood, PVA glue, design ideas, evaluation, peer assessment, success criteria, wood assembly and joining techniques.
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	Designing for a specific client and their needs/demands.	Designing for a specific company Brief and need.			

## Key Stage 3: Year 8 RM

Overall Curriculum Goals					
To understand and be able to produce a range of design ideas for a set brief.					
To develop critical thinking skills to analyse why we use different materials for certain designs and understanding which would work the best.					
To understand how to realise design concepts with increased precision, accuracy and independence.					
To understand basic theory concepts for the 3 main material areas					
To understand key elements of design movements, and how these can be applied to their own design ideas.					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Mobile Phone Holder project. To include; Cutting, filing and finishing of different types of wood. Designing of specific products. Use of wood adhesives.	Alessi clock. To include; Brief, Specification, design work, modelling, production planning and final 3d outcome	Alessi clock. To include; Brief, Specification, design work, modelling, production planning and final 3d outcome.	Coat Hook To include; Cutting, filing and finishing metals, marking and drilling metals. Bending metals and using jigs. Designing and shaping Foamex end pieces.	LED Torch To include; populating PCB using soldering, the graphical design of the torch packaging net.	LED Torch To include; populating PCB using soldering, the graphical design of the torch packaging net.
Woods theory lesson and test.	Plastics theory lesson and test.		Metal theory lesson and test	End of Year Exam	
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
Pine, plywood, PVA glue, design ideas, evaluation, peer assessment, success criteria.	Design Ideas Concept sketching Presentation drawing and rendering Prototype, 3D modelling. Final outcome Evaluation  Plastics theory – Bio-Polymers Industrial processes, workshop processes, Sustainability of plastics and recycling codes	Design Ideas Concept sketching Presentation drawing and rendering Prototype, 3D modelling. Final outcome Evaluation	Aluminium, pillar drill, centre-punch, scribe, deburr, bending jig, Foamex. Specific material names and processes as required by project outcomes	Soldering, PCB, LED, resistor, toggle switch, battery. Graphics, nets, packaging, text/fonts, logos. Final outcome. Card.	Soldering, PCB, LED, resistor, toggle switch, battery. Graphics, nets, packaging, text/fonts, logos. Final outcome. Card.
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	Researching successful design and manufacturing companies.				

## Key Stage 3: Year 7 **FOOD**

Overall Curriculum Goals					
<p>To understand and be able to demonstrate a range of practical skills include knife skills</p> <p>To understand the working characteristics, functional and chemical properties of ingredients</p> <p>To understand the nutritional qualities of carbohydrates and fibre in the diet</p> <p>To understand diet related illness in relation to sugar, salt and processed foods</p> <p>To understand the importance of health, safety and hygiene when preparing food.</p>					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<p><u>Introduction to the practical area</u></p> <p>To include Food Preparation skills</p> <p>Health and safety when in the kitchen and using small scale equipment with the emphasis on knives and cutting skills. Bridge hold and claw grip</p> <p>Practical work to include high levels of food, personal hygiene, kitchen hygiene, food hygiene and food poisoning.</p>	<p><b><u>Carbohydrates, Fibre and Enzymic browning.</u></b></p> <p>To include the role of carbohydrates and fibre in the diet, how to distinguish between starch and sugar, simple and complex carbohydrates</p> <p><b>Introduction to Food Science</b></p> <p>Test, Fruit Salad Practical, Fruit Salad Science (Enzymic browning), Carbs</p> <p>Health and safety theory and test</p> <p>Fruit salad Practical</p>	<p>To include food preparation skills, health and safety. Types of fibre, sources of soluble and insoluble fibre, the benefits of a high fibre diet.</p>	<p>To include food preparation skills, Health and safety.</p> <p>Theory to include the difference between flours and their uses in recipes, the impact different flours have on the structure of baked products,</p> <p><b>Food science – Raising agents</b></p> <p>the scientific process involved in making <b>scones</b>.</p> <p>Weighing and measuring skills</p> <p>Test result and practical assessment</p> <p><b>Cheese twists</b> and assessment 4 test.</p>	<p>To include Food preparation skills, health and safety.</p> <p>Why we need sugar and RI, added sugar, the effects of eating too much sugar, ways to lower sugar in diet.</p>	<p>To include Food preparation skills, Health and safety.</p> <p>The problems caused by excessive fast-food intake, the link between fast-food intake and nutrient deficiencies, how to improve the diet of children.</p> <p>EOY exam assessment -</p> <p>Practical assessment -<b>Scones</b></p>
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
<p>Knife skills</p> <p>Health and Safety</p> <p>Knife Safety – Bridge hold and Claw grip</p> <p>Food hygiene</p> <p>Kitchen hygiene</p> <p>Personal hygiene</p> <p>Food poisoning</p> <p>Microbes</p> <p>Ambient food</p> <p>Danger zone</p> <p>High risk foods</p>	<p>Enzymic browning</p> <p>Carbohydrates</p> <p>Function of Carbohydrates</p> <p>Starch (complex carbs)</p> <p>Sugar (Simple Carbs)</p> <p>Eatwell guide</p> <p>Healthy Eating guidelines</p> <p>Texture</p> <p>Taste</p> <p>Flavour</p> <p>Aroma</p>	<p>Health and Safety</p> <p>Fibre</p> <p>Function of fibre</p> <p>soluble and insoluble fibre</p> <p>Eatwell guide</p> <p>Healthy Eating Guidelines</p> <p>Balanced diet</p> <p>Texture</p> <p>Taste</p> <p>Flavour</p> <p>Aroma</p>	<p>Health and safety</p> <p>Categories of flour</p> <p>Function of ingredients (flour)</p> <p>Butter, raising agents.</p> <p>Eatwell guide</p> <p>Healthy Eating guidelines</p> <p>Balanced diet</p> <p>Texture</p> <p>Taste</p> <p>Flavour</p> <p>Aroma</p>	<p>Health and Safety</p> <p>Sugar and Recommended Intake</p> <p>Excess sugar</p> <p>Eatwell Guide</p> <p>Healthy Eating Guidelines</p> <p>Balanced diet</p> <p>Texture</p> <p>Taste</p> <p>Flavour</p> <p>Aroma</p>	<p>Excessive, salt, sugar and fats</p> <p>Diet related illness</p> <p>Nutrient deficiencies</p> <p>Eatwell Guide</p> <p>Healthy Eating Guidelines.</p> <p>Balanced diet</p> <p>Dietary reference values</p> <p>Texture</p> <p>Taste</p> <p>Flavour</p> <p>Aroma</p>
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Applying food science in a commercial setting	Formulating discussions concerning food science as a career route		Discussion of food science as a career route	Discussion diet related illness with regards to the NHS and managing the nation's health	

## Key Stage 3: Year 8 **FOOD**

Overall Curriculum Goals					
<p>To understand and be able to demonstrate a range of practical skills</p> <p>To understand the working characteristics, functional and chemical properties of ingredients</p> <p>To understand the sources and function of vitamins and minerals and fat in the diet</p> <p>To understand the preparations and storage of vegetable commodities</p> <p>To understand the importance of health, safety and hygiene when preparing food.</p>					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<p>To include Food preparation skills, health and safety.</p> <p><b>Theory</b> Critical temperatures, how bacteria multiplies, and how to prevent bacterial growth.</p> <p>What HACCP is, cross-contamination risks and preventative measures, how to complete a HACCP report.</p>	<p>To include Food preparation skills, health and safety.</p> <p><b>Theory</b> The role of vitamins and minerals, the difference between fat soluble and water soluble vitamins, sources of vitamins and minerals</p> <p><b>Assessment 1 test</b> <b>Spring roll practical</b></p>	<p>To include Food preparation skills, health and safety.</p> <p><b>Theory</b> The nutritional value of vegetables, how to safely store, prepare and cook vegetables, to plan meals incorporating vegetables</p>	<p>To include Food preparation skills, health and safety.</p> <p><b>Theory</b> Factors that influence cuisine, dishes linked to regions of the world and creating dishes from regional ingredients</p> <p>The gluten content of different types of flour, the impact of gluten on baked products, how to conduct a scientific experiment.</p> <p><b>Assessment 3 test</b> <b>Risotto practical</b></p>	<p>To include Food preparation skills, health and safety.</p> <p><b>Theory</b> The role of fat in the body, how to distinguish between good fats and bad fats, the health implications of a high fat diet.</p>	<p>To include Food preparation skills, health and safety.</p> <p><b>Theory</b> The problems caused by excessive sugar intake, the link between sugar and health, how to reduce sugar intake</p> <p><b>Assessment 6 – End of year test</b> <b>Cheesecake practical</b></p>
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
Critical temperatures Bacteria Binary fission High risk food Food hygiene Kitchen hygiene Personal hygiene Cross-contamination HACCP Detergent Core temperature Hazard Low risk foods Contamination	Fat soluble Water soluble Vitamins Minerals micronutrient Macronutrient Vitamin A, B, C, D, E, K Minerals – Calcium, Iron, Sodium Fortified Lethargic Root vegetables Tubers Texture Taste Flavour Aroma	Fat soluble Water soluble Vitamins Minerals micronutrient Macronutrient Vitamin A, B, C, D, E, K Minerals – Calcium, Iron, Sodium Fortified Lethargic Root vegetables Tubers Texture Taste Flavour Aroma	Gluten Texture Flavour Aroma Appearance Function Fermentation Cuisine Influence Regional Baked Scientific Experiment#	Visible Invisible Saturated Unsaturated Oily Healthy Eating Guideline Eatwell Guide Fatty acids Trans fats	Diet related illness Salt Sugar Fats Processed Takeaway Diabetes type 2 Stroke Heat disease Health risks Life style Risks.
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Applying food science in a commercial setting					Discussion about the role of health visitors, NHS staff and teachers in promoting healthy eating

## Key Stage 3: Year 9 - Engineering

Overall Curriculum Goals					
To understand and be able to use the Iterative Design process					
To develop critical thinking skills to analyse why we use different materials for certain designs and understanding which would work the best.					
To understand how to realise design concepts with increased precision, accuracy and independence.					
To understand and develop basic skills with CAD/CAM					
To understand theory topics for the 3 main material areas					
To understand key elements of design history – people, designers and products.					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Keyring and door sign project,  To include; working to tolerance, 2D technical drawing, 3D Design CAD tutorials, group work, polymer shaping.  Plastics theory lessons (number of lessons TBC)	Speaker project as a mini NEA project  To include; Design problem analysis, detailed research investigations with analysis, design brief and specification.  Technical drawing tutorials.  Plastics theory lessons and test (number of lessons TBC)	Speaker project as a mini NEA project  To include; Initial design ideas, design development and 3d modelling, 3D CAD tutorials.  Woods theory lessons (number of lessons TBC)	Speaker project as a mini NEA project  To include; Production of final 3d outcome, planning of production.  Woods theory lessons and test (number of lessons TBC)	Speaker project as a mini NEA project  To include; Production of final 3d outcome, planning of production, evaluation and feedback from client.  Metals theory lessons and test (number of lessons TBC)	Try Square project  To include; Manufacture of final outcome, production planning, packaging of the product (graphics etc).  Metals theory lessons and test (number of lessons TBC)
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
Tolerance, accuracy, template, construction lines, scale, CAD/CAM, offset, tutorial, technical, manufacturing.  Plastics theory – Polymers, Thermoplastics, Thermosetting plastics, Elastomers,	Problem, research, brief, specification, interview, client, analysis, ACCESSFM, feedback, primary and secondary research.  Plastics theory – Bio-Polymers Industrial processes, workshop processes, Sustainability of plastics and recycling codes	Isometric. Orthographic CAD/CAM Design Ideas Concept sketching Presentation drawing and rendering Design Development Prototype, 3D modelling  Woods theory – Hardwoods, softwoods, manufactured boards, assembly methods, finishes	Prototype, 3D modelling. Final outcome Specific material names and processes as required by project outcomes, including laser cutting, vacuum former etc.  Woods theory – sustainability, industrial processes, workshop processes	Design Development Prototype, 3D modelling. Final outcome. Evaluation, feedback, in-situ.  Specific material names and processes as required by project outcomes  Metals theory – Ferrous, non Ferrous, Alloys, assembly methods, finishes	Prototype, 3D modelling, finishing, aluminium, rivets. Final outcome Evaluation  Metals theory – industrial processes, workshop processes,
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	Students are required to find a real client who can give them an insight into their needs and requirements, and also provide regular feedback.				

## Key Stage 3: Year 9 – Product Design

Overall Curriculum Goals					
<p>To understand and be able to use the Iterative Design process</p> <p>To develop critical thinking skills to analyse why we use different materials for certain designs and understanding which would work the best.</p> <p>To understand how to realise design concepts with increased precision, accuracy and independence.</p> <p>To understand and develop basic skills with CAD/CAM</p> <p>To understand theory topics for the 3 main material areas</p> <p>To understand key elements of design history – people, designers and products.</p>					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<p>Design History POS and Coaster project</p> <p>To include; research work, drawing skills development.</p> <p>Plastics theory lessons (number of lessons TBC)</p>	<p>Design History POS and Coaster project</p> <p>To include; design work, presentation drawing, 3d prototyping and final 3d outcome</p> <p>Plastics theory lessons and test (number of lessons TBC)</p>	<p>USB Lamp project as a mini NEA project</p> <p>To include; Design problem analysis, detailed research investigations with analysis, design brief and specification.</p> <p>Initial design ideas, design development and 3d modelling.</p> <p>Woods theory lessons (number of lessons TBC)</p>	<p>USB Lamp project as a mini NEA project</p> <p>To include; 3d modelling and introduction and Production of final 3d outcome</p> <p>Woods theory lessons and test (number of lessons TBC)</p>	<p>USB Lamp project as a mini NEA project</p> <p>To include; Production of final 3d outcome</p> <p>Metals theory lessons and test (number of lessons TBC)</p>	<p>USB Lamp project as a mini NEA project</p> <p>To include; Production of final 3d outcome, evaluation and further developments/improvements.</p> <p>Metals theory lessons and test (number of lessons TBC)</p>
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
<p>Design Problem, Problem Analysis</p> <p>Design Brief</p> <p>Primary, Secondary research</p> <p>Design Specification</p> <p>Isometric. Orthographic</p> <p>CAD/CAM</p> <p>Modernism, Post-Modernism</p> <p>Plastics theory – Polymers, Thermoplastics, Thermosetting plastics, Elastomers,</p>	<p>Design Ideas</p> <p>Concept sketching</p> <p>Presentation drawing and rendering</p> <p>Prototype, 3D modelling.</p> <p>Final outcome</p> <p>Evaluation</p> <p>Plastics theory – Bio-Polymers</p> <p>Industrial processes, workshop processes, Sustainability of plastics and recycling codes</p>	<p>Design Problem, Problem Analysis</p> <p>Design Brief</p> <p>Primary, Secondary research</p> <p>Design Specification</p> <p>Isometric. Orthographic</p> <p>CAD/CAM</p> <p>Design Ideas</p> <p>Concept sketching</p> <p>Presentation drawing and rendering</p> <p>Design Development</p> <p>Prototype, 3D modelling</p> <p>Woods theory – Hardwoods, softwoods, manufactured boards, assembly methods, finishes</p>	<p>Design Development</p> <p>Prototype, 3D modelling.</p> <p>Final outcome</p> <p>Specific material names and processes as required by project outcomes</p> <p>Woods theory – sustainability, industrial processes, workshop processes</p>	<p>Design Development</p> <p>Prototype, 3D modelling.</p> <p>Final outcome</p> <p>Specific material names and processes as required by project outcomes</p> <p>Metals theory – Ferrous, non Ferrous, Alloys, assembly methods, finishes</p>	<p>Design Development</p> <p>Prototype, 3D modelling.</p> <p>Final outcome</p> <p>Evaluation</p> <p>Metals theory – industrial processes, workshop processes,</p>
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## Key Stage 3: Year 9 - Construction

Overall Curriculum Goals					
<ul style="list-style-type: none"> <li>To gain and develop high levels of wood joinery skills and painting/ decorating skills used in real life scenarios.               <ul style="list-style-type: none"> <li>To understand how to interpret and use technical source information to aid their practical work.</li> </ul> </li> <li>To understand and demonstrate appropriate Health and Safety measures used both in school and in the industry to minimise risks.</li> </ul>					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<ul style="list-style-type: none"> <li>Health &amp; Safety in the workshop.</li> <li>Interpreting and fulfilling the requirements of a brief, including technical drawing and material costs.</li> <li>Practical wood joinery skills - mirror</li> </ul>	<ul style="list-style-type: none"> <li>Interpreting and drawing technical drawing.</li> <li>Completing risk assessments for their project.</li> <li>Practical wood joinery skills – wood joints; comb joint, halving joint, mitre joint, housing joint.</li> </ul>	<ul style="list-style-type: none"> <li>Interpreting and fulfilling the requirements of a brief, including technical drawing and to plan a sequence of work.</li> <li>Practical wood joinery skills – decorative box.</li> </ul>	<ul style="list-style-type: none"> <li>High quality wood joinery skills</li> <li>Painting and decorating; identifying defects and learning about emulsions/stains/varnishes.</li> <li>Removal and safe disposal of materials and emulsions</li> </ul>	<ul style="list-style-type: none"> <li>Interpreting a brief</li> <li>Plan a sequence of work, including technical drawings, timescales, plan of manufacture and H&amp;S.</li> <li>Practical wood joinery skills – Bookends – create corner halvings, using chisels and templates to accurately cut a letter out of timber.</li> <li>Practical painting and decorating – using emulsions to paint the letter</li> </ul>	<ul style="list-style-type: none"> <li>Calculating quantities of pine</li> <li>Technical drawing</li> <li>Practical wood joinery skills – Hinge test</li> </ul>
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
<ul style="list-style-type: none"> <li>Health &amp; Safety (H&amp;S)</li> <li>Personal Protective Equipment (PPE)</li> <li>Brief</li> <li>Specification</li> <li>Scale</li> <li>Technical drawing</li> <li>Measure, mark &amp; cut</li> <li>Steel rule, try-square &amp; sharp pencil</li> <li>Tenon saw &amp; bench hook</li> <li>Waste</li> <li>Mitre joint</li> <li>Combination square</li> <li>Assembly using band clamps or sash clamps</li> <li>High quality finish</li> </ul>	<ul style="list-style-type: none"> <li>Technical drawing</li> <li>Scale</li> <li>Risk assessment</li> <li>Measure, mark &amp; cut.</li> <li>Steel rule, try-square &amp; sharp pencil.</li> <li>Quality control</li> <li>Tenon saw &amp; bench hook.</li> <li>Comb joint.</li> <li>Halving joint.</li> <li>Mitre joint.</li> <li>Housing joint.</li> <li>Assembly.</li> <li>Accuracy</li> </ul>	<ul style="list-style-type: none"> <li>Brief</li> <li>Technical drawing</li> <li>Plan a sequence of work</li> <li>Gantt charts</li> <li>H&amp;S</li> <li>Practical wood joinery skills:               <ul style="list-style-type: none"> <li>Measure, mark &amp; cut</li> <li>Steel rule, try-square &amp; sharp pencil.</li> <li>Tenon saw &amp; bench hook.</li> <li>Comb joint</li> <li>Halving joint</li> <li>Housing joint</li> <li>Mitre joint</li> <li>Assembly</li> <li>High quality finish.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Practical wood joinery &amp; painting/ decorating skills:</li> <li>Assembly</li> <li>Sash clamps</li> <li>vices</li> <li>Band clamps</li> <li>Pressure points</li> <li>High quality finish</li> <li>Masking off</li> <li>Paint defects</li> <li>Wood stains, varnish, wax and emulsions.</li> <li>Removal and safe disposal of materials &amp; emulsions</li> <li>Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Brief</li> <li>Technical drawing</li> <li>Timescales</li> <li>Gantt chart</li> <li>Plan of manufacture</li> <li>H&amp;S</li> <li>Tolerance</li> <li>Chisels</li> <li>Cut and chisel on the waste</li> <li>Templates</li> <li>Cutting curves with a coping saw</li> <li>Assembly and finish</li> <li>Masking off</li> <li>Emulsion paint</li> <li>Safe disposal of emulsions</li> <li>Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Calculating quantities: area, volume, percentages, scaling, best value for money, tolerances.</li> <li>Chisel rebate</li> <li>Accuracy</li> <li>Assembling hinges</li> <li>Pilot holes</li> <li>Screw fixings</li> <li>Alignment</li> </ul>
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## Key Stage 3: Year 9 - Food

Overall Curriculum Goals					
To understand nutrition, food provenance and the working characteristics of food materials.					
To understand food science and food safety					
To demonstrate practical cookery skills in order to gain an understanding of nutrition					
To understand the impact of food choice with regards to food.					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
<p>Introduction to nutrition and commodities through Cookery skills.</p> <p>Investigate work characteristics including sensory analysis of food.</p>	<p>Understanding of nutrition through commodities. And cookery skills <b>Commodity:</b> (Fruit and vegetables, including potatoes (fresh, frozen, dried, canned and juiced)</p> <p>Provenance, choice, science and work characteristics of food.</p>	<p>Understanding of nutrition through Cookery skills and commodities <b>Commodity:</b> Milk, cheese, yoghurt</p> <p>Provenance, choice, science and work characteristics of food.</p>	<p>Understanding of nutrition through commodities and Cookery skills. <b>Commodity:</b> Cereals (inc.flours, breakfast cereals, bread and pasta</p> <p>Provenance, choice, science and work characteristics of food.</p>	<p>Understanding of nutrition through commodities and cookery skills. <b>Commodity:</b> Meat, fish, poultry, eggs</p> <p>Provenance, choice, science and work characteristics of food.</p>	<p>Understanding of nutrition through Cookery skills. Commodity: Butter, oils, margarine, sugar and syrup</p> <p>Provenance, choice, science and work characteristics of food.</p>
Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas	Key Vocabulary/Concepts/Ideas
<p><b>Nutritional values</b>, (include sources, functions, deficiencies, excess, daily requirements)</p> <p><b>Provenance</b> -How commodity is grown/reared and processed</p> <p><b>Choice</b> -Dietary considerations</p> <p><b>Food Science</b></p> <p><b>Food safety</b> and storage</p> <p>Cooking skills linked to the all of the above.</p> <p><b>Overview of nutrients and Balanced diet.</b></p> <p><i>Subject using spaced learning</i></p> <p><b>The key learning in my subject is nutrition.</b></p> <p>Revisit some basic practical skills Such as knife skills, weighing, measuring , health, safety, hygiene</p>	<p><b>Nutritional values</b>, (include Fruit and vegetables - functions, deficiencies, excess, daily requirements) (vitamins and minerals, Fibre</p> <p><b>Provenance</b> -How commodity is grown processed</p> <p><b>Choice</b> -Dietary considerations – Vegetarians, Religious diets</p> <p><b>Food Science-</b> soup thickeners starchy vegetables</p> <p><b>Food safety</b> and storage</p> <p><b>Cooking skills</b> linked to the all of the above.</p> <p>Coleslaw, soups, vegetable as accompaniments to meals, Greek salad. Vegetable garnish.</p>	<p><b>Nutritional values</b>, (include Milk, cheese and yogurt - functions, deficiencies, excess, daily requirements) (vitamins and minerals, osteoporosis</p> <p><b>Provenance</b> -How commodity reared – Dairy farming</p> <p><b>Choice</b> -Dietary considerations – Lacto-Intolerance, Religious diets.</p> <p><b>Food Science-</b> Cheesemaking making ricotta cheese using Rennet</p> <p><b>Food safety</b> and storage</p> <p><b>Cooking skills</b> linked to the all of the above.</p> <p>Cauliflower and Broccoli cheese, custard, Egg custard tart, quiche</p>	<p><b>Nutritional values</b>, (include sources, functions, deficiencies, excess, daily requirements)</p> <p><b>Provenance</b> -How commodity is grown and processed- Cereals (inc flours, breakfast, cereals, bread and pasta- Fibre</p> <p><b>Choice</b> -Dietary considerations. Coeliac.</p> <p><b>Food Science-</b> Raising agents.</p> <p><b>Food safety</b> and storage</p> <p><b>Cooking skills</b> linked to the all of the above.</p> <p>Breadmaking- pizza, loaf of bread, Egg fried rice, Pasta making ravioli</p>	<p><b>Nutritional values</b>, (include sources, functions, deficiencies, excess, daily requirements)</p> <p><b>Provenance</b> -How commodity is reared and processed - Religious diets and protein alternatives</p> <p><b>Choice</b> -Dietary considerations</p> <p><b>Food Science-</b> Marinades, coagulation. Denaturing of meats</p> <p><b>Food safety</b> and storage</p> <p><b>Cooking skills</b> linked to the all of the above.</p> <p>Portioning a chicken, Fish, Dhal, Chicken marinade, chicken nuggets.(enrobing) Reduction sauce- Spaghetti Bolognese, chilli con carne, lentil</p>	<p><b>Nutritional values</b>, (include sources, functions, deficiencies, excess, daily requirements)</p> <p><b>Provenance</b> -How commodity is grown growing of vegetable crop for oil production, include pressing (mention fish oil)</p> <p><b>Choice</b> -Dietary considerations</p> <p><b>Food Science-</b> Plasticity, Shortening</p> <p><b>Food safety</b> and storage</p> <p><b>Cooking skills</b> linked to the all of the above.</p> <p>Rough puff pastry, Apple Tartin, Mayonnaise, Fresh fruit tarts and custard.</p>
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<p><b>A qualification in Food and Nutrition can lead to: or embark in further study in the catering industry or a qualification in the following careers</b></p> <p>Careers in Public Health</p> <p><b>Clinical nutritional dietetics</b></p> <p>Food industry</p> <p><b>Lecturing teaching</b>, Sports and Exercise nutrition, <b>Public health nutrition</b></p> <p>Food Scientist, <b>Welfare officer</b></p>	<p>films and careers information</p> <p>Films on Provenance and farming industry</p> <p>BNF films on nutritionist and food scientists</p>	<p>Posters on classroom wall showing career routes into the following jobs</p> <p>Films on Provenance and farming industry</p> <p>BNF films on nutrition and food scientists</p>	<p>Films showing the farming industry when teaching provenance</p> <p>Films showing foods scientists</p> <p>Films on Provenance and farming industry</p> <p>BNF films on nutrition and food scientists</p>	<p>Films showing the food industry</p> <p>Power point slides giving students information on routes into jobs</p> <p>Films on Provenance and farming industry</p> <p>BNF films on nutrition and food scientists</p>	<p><b>Films from the British Nutrition foundation showing food scientists</b></p> <p>Films on Provenance and farming industry</p> <p>BNF films on nutrition and food scientists</p>