



DT Curriculum Map

Year	What do students learn?	Why?	Tier 3 keywords	Threshold concepts	Literacy	Assessment
KS2	This varies from school to school but often very little DT					
Year	What do students learn?	Why?	Tier 3 keywords	Threshold concepts	Literacy	Assessment
7	<p>There are five 7-week projects:</p> <p>Product Design: learning about tools in the workshop, health and safety</p> <p>Electronics: learning to construct a circuit and manufacturing plan</p> <p>Graphics: learning the art of presentation through rendering skills and technical drawing</p> <p>Textiles: learning to use the sewing machine and decorative techniques whilst following the design process</p> <p>Food: learning key skills in the kitchen including knife skills, mixing, baking, hob work, food hygiene and routines of the kitchen. Healthy living and food safety and equipment.</p>	<p>We aim to give pupils an introduction to DT and the variety of subjects we offer.</p> <p>This is an opportunity for pupils to gain an understanding of ‘real life’ practical skills. Pupils will be learning through practical but also theory elements to enable them to become confident in the workshop, kitchen and design room.</p> <p>Health and Safety is an important part of the DT curriculum so pupils must have an understanding of safety rules and expectations.</p> <p>Pupils will be encouraged to improve their design skills through practice and demonstration. Promoting flair and creativity enabling them to have high expectations.</p> <p>In Food Technology students will come to Hanham with a variety of different skills set so this year is to access their level of ability and aptitude for the subject. This will be mainly practical skills and an introduction into ‘Healthy eating and nutrition’.</p>	<p>Research Design Manufacture Rendering Healthy Safety Techniques</p>	<p>Analyse Compare Evaluate Communicate</p>	<p>Reading Bell work for all lessons is literacy-based</p> <p>Writing There is a piece of extended writing for each of the 5 projects</p> <p>Oracy Pupils will answer questions in full sentences during discussion work and encouraged to read out loud where appropriate</p>	<p>Term 3 DOYA MCQ</p> <p>Each module is assessed using the DOYA grading for Design, Make and Evaluate every rotation. Each area will focus on two of these criteria</p> <p>Term 6 DOYA MCQ</p>
Year	What do students learn?	Why?	Tier 3 keywords	Threshold concepts	Literacy	Assessment
8	<p>Product Design: learn to construct finger joints and apply finishing techniques.</p> <p>CAD/CAM: Learn to use 2D design to manipulate designs to create jewellery working from a designer.</p> <p>Graphics: Investigate and develop merchandise to promote festivals.</p> <p>Textiles: Investigate textiles from around the world. Learn the use of ACCESSFM when</p>	<p>We aim to develop skills, knowledge and DT techniques from year 7. We also introduce the social and moral aspects of DT.</p> <p>Pupils will need to gain complex skills in designing, making and evaluation. Pupils will be developing confidence and resilience through practical work but also theory elements to enable them to become an established learner in the workshop, kitchen and design room.</p>	<p>Construct Annotate Specification Promote Blending Shaping Finishing</p>	<p>Manipulate Develop Investigate Evaluate</p>	<p>Reading Bell work for all lessons is literacy-based</p> <p>Writing There is a piece of extended writing for each of the 5 projects</p> <p>Oracy Pupils will answer questions in full</p>	<p>Term 3 DOYA MCQ</p> <p>Each module is assessed using the DOYA grading for Design, Make and Evaluate every rotation. Each area will focus on two of these criteria</p>

	<p>producing extended writing. Develop knowledge on the machines by inserting a zip.</p> <p>Food: Students will be learning about Special diets including ages, allergies, intolerance, religion, vegetarians and vegans. They will practice and develop skills in blending, shaping and assembly, dough, knife skills, Frying, baking, and making sauces.</p>	<p>Pupils will be provided with a taster of the GCSE terminology when producing extended writing. Pupils will be encouraged to improve their design skills through practice and demonstration. Promoting flair and creativity enabling them to link design to wider changes in society.</p> <p>In Food Technology students will be able to understand the reasons behind people's choices of foods but focusing mainly on medical, moral and religious reasons. This will support their learning and understanding in preparation for the GCSE. They will be able to develop their literacy skills by completing a research and answer question based around the GCSE curriculum.</p>			<p>sentences during discussion work and encouraged to read out loud where appropriate</p>	<p>Term 6 DOYA MCQ</p>
Year	What do students learn?	Why?	Tier 3 keywords	Threshold concepts	Literacy	Assessment
9	<p>Design Technology Product Design</p> <ul style="list-style-type: none"> • Clock Project – Designers, wood and polymers • Textiles Phone holder – fibres, fabric and construction • Automata – learning about motion • Environmental project – 6Rs and social impact • Collaboration project <p>Textiles</p> <ul style="list-style-type: none"> • Cushion/ Bag • Sewing Pouch • Pop up card – theory on paper and board • Keyring using smart materials and woods • Shorts – Designer and environment • Toys – client based <p>Food Students will be learning the coursework section of the GCSE.</p> <ul style="list-style-type: none"> • Food Science – Investigation into the working characteristics of ingredients. • Nutritional analysis – Understanding the contents of recipes and being able to improve and analyse the value of ingredients. 	<p>Design and Technology</p> <p>Pupils will be studying the CORE aspects of the specification through practical and theory to gain a broad knowledge of all the key materials within DT. Pupils need to be developing iterative design processes in preparation for the NEA. Each project allows students to learn through experience. Pupils need to understand the environmental impact of design and different design processes. To gain knowledge and inspiration from the work of others is a key aspect towards both the theory and NEA.</p> <p>Food</p> <p>This will be an introduction into the GCSE: Food Preparation and Nutrition. This year will focus on the coursework and the theory to support this. Students will be expected to present work in a portfolio manner with reference to food science, nutritional analysis and food provenance. This will be supporting 50% of the GCSE and will provide the</p>	<p>Nutritional Food science Designers Sustainability Social Aesthetics Ergonomics Anthropometrics Thermosetting Thermoforming Fibres Fabrics</p>	<p>Improve Impact Iteration Modelling</p>	<p>Reading Bell work is literacy based or retrieval</p> <p>Writing Extended writing in each project. Research, Specification, Annotations, Planning, Evaluation.</p> <p>Oracy Pupils will answer questions in full sentences during discussion work and encouraged to read out loud where appropriate</p>	<p>Y9 PPE Year 9 Assessment week in term 6</p> <p>GCSE Specification assessment Term 2 and 4</p>

	<ul style="list-style-type: none"> Food provenance – Looking closely to a range of countries and understanding the route of methods of cooking, farming and traditional ingredients. NEA 1 & NEA 2 – 3 practise pieces of both. 	students will a resource to refer to for their final pieces of coursework.				
Year	What do students learn?	Why?	Tier 3 keywords	Threshold concepts	Literacy	Assessment
10	<p>Design and Technology</p> <p>Product Design</p> <ul style="list-style-type: none"> Key skills – slot toy animals Joints Resin and polymers Laser cutting exercises Upcycling and sustainability Practice NEA – Lamp Project and educational aid <p>Textiles</p> <ul style="list-style-type: none"> Childrens clothing – Practice NEA Plastics – container manufacture – sustainability Production Systems Begin NEA – Context given June 1st <p>Food</p> <p>Students will be learning the theory section of the GCSE.</p> <ul style="list-style-type: none"> Food Science – Coagulation, denaturation, enzymic browning, aeration, caramelisation etc Cooking methods – convection, conduction, radiation Food spoilage – micro organisms, bacteria, pathogens Food safety – temperatures, dates, high risk foods 	<p>Design and Technology</p> <p>Pupils will be studying the CORE aspects of the specification through practical and theory to gain a broad knowledge of all the key materials within DT. Pupils will learn specific key materials and systems which will be covered through theory lessons and reinforced through exam questions. A practice NEA is essential to cover all the design and make elements of the specification.</p> <p>Food</p> <p>Students will need to learn the theory content of the course to support and develop their understanding of ingredients and cooking methods for their coursework and the exam. The Schemes of work will allow students to further develop their understand of the working characteristics of ingredients whilst being able to understand how these can be changed by heat, temperature, PH level, and other environmental factors. Students will be expected to write essay style exam questions as well as a variety of fact-based short answers.</p>	<p>Food safety</p> <p>Food Spoilage</p> <p>Food Science</p> <p>Market research</p> <p>Product analysis</p> <p>Planned obsolescence</p> <p>Finite resources</p> <p>Production methods</p> <p>Disassembling</p>	<p>Testing</p> <p>Iteration</p> <p>Developing</p>	<p>Reading</p> <p>Bell work revision glossary cards produced once a week.</p> <p>Writing</p> <p>Theory lesson once a week.</p> <p>Use of exam questions for retrieval practice and extended writing termly</p> <p>Oracy</p> <p>Pupils will answer questions in full sentences during discussion work and encouraged to read out loud where appropriate</p>	<p>Term 6 Y10 PPE</p> <p>Practice NEA assessment using AQA specification</p> <p>Investigating and research.</p> <p>Design Brief and Specification.</p> <p>Initial design ideas.</p> <p>Development of design ideas.</p> <p>Prototype manufacture.</p> <p>Testing and evaluation.</p>
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<p>11</p>	<p>Design Technology – Product Design and Textiles</p> <p>1 Theory lesson a week focus on Core skills 20% of paper and Specific Materials 30 % of paper in line with NEA. 50% design and make.</p> <p>NEA - Context given by AQA Pupils will follow each specification point using fixed deadline for each criteria. Identifying and exploring contextual challenge. Design brief and Specification Initial design ideas Development of designs Modelling and manufacture Evaluation and testing</p> <p>Food Preparation & Nutrition: Students will be completing NEA 1 15% & NEA 2 35%</p>	<p>To ensure pupils have specific knowledge of the DT specification.</p> <p>The NEA is 50% of the overall grade. The NEA is marked out of 100. Students will need to complete the coursework to enable completion of GCSE</p> <p>Students will need to complete both pieces of coursework to enable completion of the GCSE.</p>	<p>Prototype Manufacturing Specification Production Aid Quality Control</p>	<p>Iteration Evaluating Improving Testing</p>	<p>Reading Bell work revision glossary cards produced once a week.</p> <p>Writing Theory lesson once a week. Use of exam questions for retrieval practice and extended writing termly</p> <p>Oracy Pupils will answer questions in full sentences during discussion work and encouraged to read out loud where appropriate</p>	<p>Term 2 Y11 PPE Feedback sheet for NEA</p> <p>Covering Investigating and research. Design Brief and Specification. Initial design ideas. Development of design ideas. Prototype manufacture. Testing and evaluation</p> <p>Term 3 Y11 PPE NEA 50% assessment</p>
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