

Design Technology Year 9 Curriculum Map



N.B. Pupils will follow the curriculum map in different sequence depending on which class they are in. They will complete 12 lessons of each material area per year of KS3. Due to rooming and staffing allocation, pupils may not always be in a specialised DT room.

YEAR 9	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Curriculum Content	<p>Product Design <u>Expanding skills in Product Design.</u></p> <p>Composite – Architecture and CAD. Pupils will expand their knowledge they have gained during KS3 Product Design through design, make, evaluate and theoretical knowledge tasks.</p> <p>Component 1: Design brief and research. Pupils will be given their design brief and will write their own specification for a building of their choice. Research into a chosen architect will be undertaken. CCC</p> <p>Component 2: Architect sketches. Pupils will work on their sketching skills of existing buildings by their chosen architect. CCC</p> <p>Component 3: Architect sketches. Pupils will improve their sketching skills of existing buildings by their chosen architect. CCC</p> <p>Component 4: Introduction to CAD and Sketch up. Pupils will learn how to use a 3D CAD modelling programme to communicate their designs. CCC</p> <p>Component 5: Sketch up development. Pupils will use Sketch up to create their own designs for buildings inspired by their chosen architect. CCC</p> <p>Component 6: Sketch up development. Pupils will use Sketch up to create their own designs for buildings inspired by their chosen architect. CCCC</p>	<p>Product Design <u>Expanding skills in Product Design.</u></p> <p>Component 7: Sketch up development. Pupils will use Sketch up to create their own designs for buildings inspired by their chosen architect. CCC</p> <p>Component 8: 3D Modelling. Pupils will begin to model a chosen design using materials and tools in the workshop. They will explore why 3D models are necessary when communicating design ideas. CCC</p> <p>Component 9: 3D Modelling. Pupils will continue to model and refine their chosen design idea in 3D. CCCC</p> <p>Component 10: 3D Modelling. Completion of 3D modelling whilst ensuring it meets the needs of their specification. CCC</p> <p>Component 11: Sketch of final building. Pupils will develop their sketching techniques by drawing their final design by hand. CCC</p> <p>Component 12: Evaluation. Pupils will use ACCESS FM as a writing frame to evaluate their final architectural proposal. They will evaluate against their original specification to see if it meets their original requirements. CCCC</p>	<p>Textiles <u>Expanding skills in Textiles.</u></p> <p>Composite – Students are challenged to work much more independently when making a tie-dyed drawstring bag. Whilst they have used some of the dyeing techniques previously, they will now have to make choices about the pattern and design and learn and recall much higher-level skills in order for the techniques and pattern to be successful. Students will design and cut a stencil requiring control and manual dexterity. The students will be required to create and install a patch pocket securely and follow detailed instructions in order to successfully manufacture the bag.</p> <p>Component 1: H&S in workshop. Intro to design roles. Intro to project and subject specific vocabulary. Product analysis. CCCC</p> <p>Component 2: Design development CCC</p> <p>Component 3: Continued CCC</p>	<p>Textiles <u>Expanding skills in Textiles.</u></p> <p>Component 4: Tie & dye fabrics, create a stencil and measure cut and apply a pocket. Sewing machine practice CCCC</p> <p>Component 5: Continue. CCCC</p> <p>Component 6: Manufacture. The students will be required to create and install a patch pocket securely and follow detailed instructions in order to successfully manufacture the bag. CCCC</p> <p>Component 7: manufacture. The students will be required to create and install a patch pocket securely and follow detailed instructions in order to successfully manufacture the bag. CCCC</p> <p>Component 8: manufacture. The students will be required to create and install a patch pocket securely and follow detailed instructions in order to successfully manufacture the bag. CCCC</p> <p>Component 9: Evaluation and modifications. CCCC</p> <p>Component 10: Fabric manipulation techniques CC</p> <p>Component 11: As above CC</p> <p>Component 12: As above CC</p>	<p>Food <u>Expanding skills in Food.</u></p> <p>Composite – Food around the world. During this rotation, pupils will learn about food from other countries whilst cooking a variety of dishes from around the world. Pupils will be able to suggest adaptations and changes to make the dishes made suitable for a range of people.</p> <p>Component 1: Food around the world. Food provenance.</p> <p>Component 2: Spring rolls. Knife skills, hob skills, temperature control, baking, portioning and rolling. CCCC</p> <p>Component 3: Quorn Thai green curry. Knife skills, seasoning, adaptations, CCCC</p> <p>Component 4: Seasoning food. Exploring why we use seasoning in our food, where different seasonings come from, the history of herbs and spices and what recipes call for specific seasonings.</p> <p>Component 5: Parmesan and herb muffins. Weighing and measuring, seasoning, portioning and baking. CCCC</p> <p>Component 6: Vegetable samosas. Weighing and measuring, stir frying, seasoning, portioning and baking. CCCC</p>	<p>Food <u>Expanding skills in Food.</u></p> <p>Composite – Diets and allergies</p> <p>Component 1: Vegetarian and vegan diets. Exploring why people might choose to follow certain diets and what they can and cannot eat. CCCC</p> <p>Component 2: Spinach, squash and chickpea curry. Knife skills, measuring, weighing, stir frying and seasoning. Creating a healthy vegetarian meal. CCCC</p> <p>Component 3: Naan bread. Weighing and measuring, proving, kneading and baking. Creating an accompaniment for a meal. CCCC</p> <p>Component 4: Allergies and intolerances. Learning about the different allergies and intolerances people may live with and how we can adapt recipes to suit a wide variety of people.</p> <p>Component 5: Banana and chia seed loaf. Weighing and measuring, baking. Creating a fruit-based loaf cake. CCCC</p> <p>Component 6: Pineapple upside down cake. Weighing and measuring, baking, presentation. Creating a fruit-based cake. CCCC</p>
Prior knowledge and skills (from previous year / key stage)	Use of tools and machinery from year 7 & 8 Sketching skills Analysis and evaluation	Sketch up CAD skills Hand making skills ACCESS FM Evaluation	Surface pattern development Use of subject specific vocabulary Use of machinery and sewing machines Expansion of practical skill base		Practical skills Health safety and hygiene Nutrition and healthy eating	Practical skills Health safety and hygiene Nutrition and healthy eating
Core Knowledge Organiser content	Research techniques Sketching skills Benefits and disadvantages of CAD/CAM Sketch up tools	Sketch up tools 3D modelling techniques Sketching of final design Evaluation using ACCESS FM	Students understand the various roles within design Students objectively analyse their progress, modifying decisions accordingly Students are able to make decisions independently and confidently		Food around the world Allergies and intolerances Vegetarian and vegan diets Seasoning food Ingredient and equipment knowledge	Safe use of equipment Measuring and weighing out Transferring heat in different ways Ability to follow a recipe Time management Adapting recipes

			Students are more confident and have a greater skill base when manufacturing			
Assessment Objectives	Responding to a design brief. Writing a specification using ACCESS FM. Researching into a chosen architect. Creating designs to fulfil a specification. Learning to use a CAD program.	Sketch up development. 3D modelling. Hand sketching skills. Evaluation using ACCESS FM.	Use own initiative to develop a design solution To develop existing practical skills to create new and exciting design outcomes.		Can I learn about different types of food around the world? Can I make cheap, healthy meals inspired by food from around the world? Can I season my food to enhance the flavour?	Do I know about vegetarian and vegan diets? Can I make vegetarian and vegan recipes from around the world? Do I know about allergies and intolerances people have in their diets?
Vocabulary / Key Subject Terminology	CAD/CAM Architecture Research Designs Annotation Sketch up Development	3D Modelling Prototype CAD/CAM Evaluation	Analyse, annotate, blended fibres, bonded fibres, characteristics, computer aided design, computer aided manufacture, disassembly, mass production, quality assurance, quality control, fabric manipulation		Seasoning Seasonal Local food	Vegan Vegetarian Intolerance Allergies
Assessment 1	As pupils complete each area of DT at a different time, pupils are assessed across all the areas for AP1. Pupils are given revision activities on class charts to help with the areas Of DT they may not have studied for a while		As pupils complete each area of DT at a different time, pupils are assessed across all the areas for AP1. Pupils are given revision activities on class charts to help with the areas Of DT they may not have studied for a while		As pupils complete each area of DT at a different time, pupils are assessed across all the areas for AP1. Pupils are given revision activities on class charts to help with the areas Of DT they may not have studied for a while	
Assessment 2	Pupils should have studied at 3 areas of DT. They will again be assessed across all three areas		Pupils should have studied at 3 areas of DT. They will again be assessed across all three areas		Pupils should have studied at 3 areas of DT. They will again be assessed across all three areas	
Cross Curricular Links with other Faculties	<u>Maths</u> – Measuring and marking out. Isometric drawing skills. 3D shapes. <u>Art</u> – Sketching and shading skills. <u>English</u> – Analysis and evaluation of products.	<u>Maths</u> – Measuring and marking out. Isometric drawing skills. 3D shapes. <u>Art</u> – Sketching and shading skills. <u>English</u> – Analysis and evaluation of products.	Art- surface pattern, placement of design Maths- spatial awareness, accurate measuring English- analysis, evaluative skills, vocabulary, spelling		<u>Maths</u> – Measuring and weighing out. <u>Science</u> – Food science, nutrients and food groups. <u>History</u> – Origins of spices. <u>English</u> – Written and verbal opinions of dishes.	<u>Maths</u> – Measuring and weighing out. <u>Science</u> – Food science, nutrients and food groups. <u>English</u> – Written and verbal opinions of dishes.
Extra-Curricular Offer	<u>Jewellery club</u> – Tuesday lunchtime.	<u>Eco schools club</u> – Wednesday after school. A different year group each week.				
Time Allocation	<u>Product Design</u>	<u>1 lesson per week for 12 weeks of the year.</u>	<u>Textiles</u>	<u>1 lesson per week for 12 weeks of the year.</u>	<u>Food</u>	<u>1 lesson per week for 12 weeks of the year.</u>

