

Technology KS3 Curriculum Map

	Design & Technology 1	Electronics	Design & Technology 2	Food	Graphics
Year 7 THEMES	<ul style="list-style-type: none"> H&S in the D&T workshop Development of design and manufacturing skills – timber focused 	<ul style="list-style-type: none"> H&S in the Electronics workshop Soldering/de-soldering electronic components Simple theory: transistor, LED, resistors 	<ul style="list-style-type: none"> H&S in the D&T workshop Development of design and manufacturing skills – timber/Polymers focused 	<ul style="list-style-type: none"> H&S in the food kitchen Basic knife skills and preparation of fruits and vegetables Basic cooking skills using the hob, grill and oven Simple theory: healthy eating 	
Students will be taught the following key themes: <ul style="list-style-type: none"> Students will be taught health, safety and hygiene protocols within a food preparation environment Students will be taught key practical food preparation skills, as well as an understanding of healthy eating Students will be taught health and safety protocols within a technology workshop environment Students will be taught key practical technology knowledge, design and manufacturing skills within the three focus materials areas (timber, metal, electronics) 	<p>Project 1: OCC Puzzle project</p> <p>Understand the working properties of timber and man-made boards by making a simple 3-piece wooden puzzle with packaging. Learn how to use equipment safely (drilling, sawing, filing and sanding). Understand to need to finish materials. Learn about commercial packaging production.</p>	<p>Project 1: Moisture Sensor project</p> <p>Understanding of LED, transistor and resistor theory and practically applying their understanding and skills to make a simple torch and moisture sensor.</p>	<p>Project 1: Photo Frame</p> <p>Understand the working properties of timber, man-made boards and polymers by making a pine wooden photo frame, with a plastic frame stand. Learn how to use equipment safely (drilling, sawing, filing, Line-bending and sanding). Understand the need to finish materials. Learn about manufacturing processes.</p>	<p>Project 1: Healthy Eating</p> <p>Understanding of the basics of healthy eating and develop practical skills to enable the cooking of a variety of healthy foods such as: fruit crumble, smoothie, muffins etc.</p>	
Assessment	OCC Puzzle practical evaluation End of Unit Assessment	Moisture sensor practical evaluation End of Unit Assessment	Photo Frame practical evaluation End of Unit Assessment	Soya, Tofu, Beans, Nuts and Seeds Practical Assessment End of Unit Assessment	

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Year 8 THEMES	<ul style="list-style-type: none"> H&S in the D&T workshop Development of design and manufacturing skills – plastics focused 	<ul style="list-style-type: none"> Risk assessment in the Electronics workshop Advanced circuit construction using an astable circuit Simple theory: resistor/ capacitor networks, frequency, integrated circuit concepts 	<ul style="list-style-type: none"> H&S in the D&T workshop Design and development skills. Linking to STEAM 	<ul style="list-style-type: none"> H&S in the food kitchen – cooking with raw meat Basic cooking skills - preparation of sauces and breads Basic cooking skills using the hob, grill and oven Simple theory: heat transfer, chemical raising agents 	
Students will be taught the following key themes: <ul style="list-style-type: none"> Students will be taught health and safety protocols within a technology workshop environment Students will be taught health, safety and hygiene protocols within a food preparation environment Students will be taught key practical food preparation skills, as well as an understanding of healthy eating Students will be taught key practical technology knowledge, design and manufacturing skills within the three focus materials areas (plastics, metal, electronics) 	Project 2: Clock project Understand the working properties of polymers to manufacture a simple clock. Understand how to apply the work of others to their designs by using the features of a design movement. Understand the use of the design process in their work by doing basic research to support their designs. Understand the use of CAD/CAM in designing and using the laser cutter to manufacture their designs.	Project 2: Astable Understanding the theory of resistor capacitor networks, frequency of the output of a circuit and how it can be used to generate soundwaves and practically, applying their understanding and skills to make a sound generating circuit, utilising an astable integrated circuit.	Project 1: Structures (Bridges) Understand the design process and design development to produce a bridge prototype. Linking to STEAM, bringing together, science, maths, engineering and design to understand how design and manufacturer works in the real world.	Project 2: Bread & Sauce Making Understanding of the basics of heat transfer and chemical raising agents and develop practical skills to enable the cooking of bread and sauces.	
Assessment	Clock practical evaluation End of Unit Assessment	Practice Circuit Assessment Astable Circuit Assessment End of Unit Assessment	Bridge prototypes practical evaluation End of Unit Assessment	Bread/Sauce Practical Assessment End of Unit Assessment	

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Year 9 THEMES	<ul style="list-style-type: none"> H&S in the D&T workshop Development of design and manufacturing skills – timber/polymers focused 		<ul style="list-style-type: none"> H&S in the D&T workshop Development of design and manufacturing skills – timber/polymers focused. Including elements of Electronics. 	<ul style="list-style-type: none"> H&S in the food kitchen – bacteria Basic cooking skills - preparation of pasta, pastry and cold desserts Basic cooking skills using the fridge, hob, grill and oven Simple theory: flour and fat properties, chilling procedures 	<ul style="list-style-type: none"> Understand the theory behind and develop skills in: basic graphics and sketching techniques in a variety of materials - perspective and crating, 3-D shapes, using a ruler, rendering
Students will be taught the following key themes: <ul style="list-style-type: none"> Students will be taught health and safety protocols within a technology workshop environment Students will be taught health, safety and hygiene protocols within a food preparation environment Students will be taught key practical food preparation skills, as well as an understanding of healthy eating Students will be taught key practical technology skills and knowledge within the three focus materials areas (plastics, timber, metal) Students will be taught key practical graphics skills and knowledge 	Project 3: Speaker project Understanding how the properties of sound can be utilised to manufacture a passive amplifier. Previous skills of working with timber, man-made boards and polymers are developed further.		Project 3: Night Light Continue to develop their understanding of the properties of timbers and polymers to design and create a night light. Students will continue to develop their electronics knowledge and apply to the manufacturing of the night light. Understand the use of CAD/CAM in designing and using the laser cutter to manufacture their designs.	Project 3: Pastry & Cold Desserts Understanding of flour, fat properties and chilling procedures and develop practical skills to enable the cooking of pastry and pasta products, Swiss roll and cheesecake.	Project 1: Introduction to Graphic Design To acquire skills in graphic communication by developing confidence in isometric sketching, an understanding of perspective and to develop skills in using a variety of materials used for graphic communication.
Assessment	Speaker practical evaluation End of Unit Assessment		Garden trowel practical evaluation End of Unit Assessment	Pastry and Cold Desserts Practical Assessment End of Unit Assessment/How to carry out Nutritional Analysis	Continual assessment