

CURRICULUM OVERVIEW FOR YEAR 7 D&T

Completed on a carousel

Rotation	A	B	C	D
Topic	Paper & Boards	CAD, CAM, Isometric and Orthographic Drawing	Thermoforming & Thermosetting polymers	Electronic systems and metal joining
Knowledge	Different examples of paper and boards, paper sizes and weight, finishes, stock forms and sustainability, commercial cutting processes	CAD and CAM with advantages and disadvantages, isometric and orthographic drawing, production methods	Properties of thermoforming and thermosetting polymers, forming polymer processes, stock forms, environmental impact	Inputs and outputs in electronic systems, circuit diagrams, microcontrollers, PIC, metal joining (soldering, brazing, welding)
Skills	Visual communication, practical activities, interpretation of diagrams and symbols, verbal feedback, health and safety precautions, quality control during manufacture			
Key Marked Piece (Summative Assessments in bold)	Theory tasks and design ideas End of unit assessment	Theory tasks and working drawing End of unit assessment	Theory tasks and modelling work End of unit assessment	Theory tasks and final outcomes End of unit assessment
Vocabulary	<ul style="list-style-type: none"> • GSM (grams per square metre) • Microns • Paper • Card • Cardboard • Die cutting • Recycling • Laminating 	<ul style="list-style-type: none"> Computer aided design (CAD) Computer aided manufacture (CAM) Isometric drawing 3rd Angle Orthographic One-off production Batch production Mass production Continuous production 	<ul style="list-style-type: none"> Thermoforming Acrylic Thermosetting Vacuum forming Sheet bending Injection moulding Former Crude oil Non-renewable 	<ul style="list-style-type: none"> • Input vs Output • LED • Switch • Battery • Microcontroller • Programmable Interface Controller (PIC) • Soldering • Brazing • Welding

CURRICULUM OVERVIEW FOR YEAR 8 D&T

Completed on a carousel				
Rotation	A	B	C	D
Topic	SMART and Modern Materials	Design and Technology in our world	Ferrous and non-ferrous metals	Natural and manufactured wood
Knowledge	Different examples of SMART, modern and composite materials, properties of the materials, how they are used in everyday life	Sustainability, life cycle analysis, SIX R's, ecological and carbon footprint, Fairtrade, consumer choice	Categorisation of metals, properties of metals, stock forms, finishes, conductivity, sustainability issues	Categorisation and properties of hardwoods, softwoods and manmade woods, finishing woods, stock forms, sizes,
Skills	Visual communication, practical activities, interpretation of diagrams and symbols, verbal feedback, health and safety precautions, quality control during manufacture, CAD designing for manufacture			
Key Marked Piece (Summative Assessments in bold)	Theory tasks and design ideas End of unit assessment	Theory task and working drawing End of unit assessment	Theory task and final outcomes End of unit assessment	Theory task and modelling work End of unit assessment
Vocabulary	<ul style="list-style-type: none"> Stimulus Thermochromic pigment Photochromic pigment Polymorph Shape memory alloy Carbon Fibre Reinforced Polymer Kevlar 	<ul style="list-style-type: none"> Market pull Technology push Environment Sustainability Raw materials Landfill Recycle Reuse Reduce 	<ul style="list-style-type: none"> Ferrous Non-ferrous Alloy Aluminium Hardness Ductile Sheet Reel Non-renewable 	<ul style="list-style-type: none"> Hardwood Mahogany Softwood Pine Manmade wood Medium density fibreboard (MDF) Plywood Board

CURRICULUM OVERVIEW FOR YEAR 7 FOOD/TEXTILES

Completed on a carousel		
Rotation	A	B
Topic	Knife skills/basic cooking skills	Embroidery/basic sewing skills
Knowledge	Eatwell guide, what constitutes a healthy diet and the benefits to the body, hygiene and safety	Different examples of embroidery stitches, basic sewing skills
Skills	<p>A range of practical activities, interpretation of the Eatwell guide, hygiene and safety precautions when working with food, developing independence.</p> <p>Practicals include: Fruit Salad Soup Crumble Macaroni Cheese Chilli Rock Cakes Scones</p>	<p>Development of fine motor skills, visual communication, practical activities, creative skills. Focus is on hand stitching and embroidery.</p> <p>Practical activities include making: Needlecase Mascot</p>
Key Marked Piece (Summative Assessments in bold)	Practical tasks End of unit assessment Practical Assessment	Practical tasks End of unit assessment Practical Assessment
Vocabulary	<ul style="list-style-type: none"> Nutrients Eatwell Guide Starchy Carbohydrates Proteins Cross-contamination Hygiene 	<ul style="list-style-type: none"> Aesthetics Embroidery Holbein Quality Blanket stitch Chain stitch Whipped running stitch

CURRICULUM OVERVIEW FOR YEAR 8 FOOD/TEXTILES

Completed on a carousel		
Rotation	A	B
Topic	Nutrition/practical skills	Hand and machine sewing
Knowledge	Source and function of nutrients in the body	Use of a sewing machine
Skills	<p>A range of practical activities, understanding food science/nutrition, developing independence.</p> <p>Practicals include: Bolognese Pizza Jam Tarts Savoury Pie Victoria Sponge Slices Curry Chocolate Chunk Muffins Biscuits</p>	<p>Development of fine motor skills, visual communication, practical activities. creative skills, threading, disassembly and use of a sewing machine</p> <p>Practical activity: Making and embellishing a tie dyed cushion</p>
Key Marked Piece (Summative Assessments in bold)	<p>Practical tasks</p> <p>End of unit assessment</p> <p>Practical Assessment</p>	<p>Practical tasks</p> <p>End of unit assessment</p> <p>Practical Assessment</p>
Vocabulary	<ul style="list-style-type: none"> • Micronutrient • Macronutrient • Vitamins • Minerals • Fats • Carbohydrates • Protein • Function • Methods of cooking • Rubbing in method • Creaming method • Melting method 	<ul style="list-style-type: none"> • Aesthetics • Embroidery • Specification • Machining • Quality • Take up lever • Presser foot • Reverse feed • Thread guide • Stitch pattern selector • Stitch width control • Stitch length control