

Key Stage 3: Year 7 D&T

<p>Overall Curriculum Goals - developing the following Big Ideas:</p> <ul style="list-style-type: none"> • Product design in real life context • Development of life skills. • Timber types, where they are from and the effects of their uses on the world. Polymers and their properties. • Applying knowledge and understanding in selecting and using tools and machinery • Practical skill building in producing high quality outcomes • Design process understanding and communication 													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Health and Safety – Introduction to subject	Timbers – different types of trees, hardwoods and softwoods	Designing – specification and design ideas	Equipment / knowledge check	Marking / cutting timber	Sanding / gluing frame & base	Making – Pillar drill	Making	Making	Making	Making	Evaluation	Structures	Materials
Key Vocabulary/Concepts/ideas													
Deciduous, coniferous, hardwood, softwood, manufactured, design, isometric, measurement, evaluation, quality, expectations, equipment, theory, practice, evaluation, measurement, design, rendering, design, annotation, isometric, quality, accuracy, acrylic, evaluation, textiles, design, tie dye, pattern, seam, embroidery, applique, embellishment, tie dye, rendering, survey, decorative, embroidery, embellishment, applique, annotation, control, accelerate, spool, thread, pattern, seam, evaluation, quality.													
15	16	17	18	19	20	1	2	3	4	5	6	7	
Bridges	teamwork	Budgeting	Making	Making	Making/testing	Introduction to Textiles	Fibres and Fabrics – weaving, different types of fabrics. Synthetic and natural.	Introduction to Superheroes – Sketching ideas	Design Brief and Market Research	Design Specification	Design Ideas	Design Ideas	
Key Vocabulary/Concepts/ideas													
Deciduous, coniferous, hardwood, softwood, manufactured, design, isometric, measurement, evaluation, quality, expectations, equipment, theory, practice, evaluation, measurement, design, rendering, design, annotation, isometric, quality, accuracy, acrylic, evaluation, textiles, design, tie dye, pattern, seam, embroidery, applique, embellishment, tie dye, rendering, survey, decorative, embroidery, embellishment, applique, annotation, control, accelerate, spool, thread, pattern, seam, evaluation, quality.													
8	9	10	11	12	13	14	15	16	17	18	19	20	
Pattern Cutting	Skills – threading the needle & tying a knot	Skills – Running stitch, back stich, loop stitch	Skills – Cross stitch, blanket stitch, button	Making	Making	Making	Making	Making	Making	Making	Making	Evaluation	
Key Vocabulary/Concepts/ideas													
Deciduous, coniferous, hardwood, softwood, manufactured, design, isometric, measurement, evaluation, quality, expectations, equipment, theory, practice, evaluation, measurement, design, rendering, design, annotation, isometric, quality, accuracy, acrylic, evaluation, textiles, design, tie dye, pattern, seam, embroidery, applique, embellishment, tie dye, rendering, survey, decorative, embroidery, embellishment, applique, annotation, control, accelerate, spool, thread, pattern, seam, evaluation, quality.													
CIAG													
<ul style="list-style-type: none"> • Students required to place themselves in the shoes of designers when they receive their design briefs and follow through the process of designing, making and evaluating. • Students to gain experience of a real life workshop environment. • Students to go in depth on the process a designer follows from designing , to trialling, researching and making to create a prototype. 													

RM	Overall Curriculum Goals - developing the following Big Ideas: <ul style="list-style-type: none"> • Practical skill building through workshop projects to apply knowledge and understanding in producing high quality outcomes • Understanding of the design process to establish realistic and deliverable project deadlines • To understand how fibres become fabrics • To understand what timbers, polymers and smart materials are. • Designing in response to a brief • Analyse the work of others • Be inspired by others • To make high quality products 														
	1	2	3	4	5	6	7	8	9	10	11	12	13		
	Timbers – introduction to hardwood, softwood and the properties of timbers.	Isometric drawing & Perspective drawing – drawing skills.	Manufacturing and mass production	Design brief – desk tidy. Market research, design spec	Design ideas	Design Ideas	2D Design – CAD CAM	Google Sketchup - CAD	Plastics – sustainability, plastic theory	Skills – finger joints	Skills – finger joints	Skills – coping saw	Marking out		
	Key Vocabulary/Concepts/ideas														
Coniferous, deciduous, polymer, timber, materials, thermoset, thermopolymer, thermo chromic, photo, chromic, acrylic, property, evaluation, textiles, fibres, synthetic, tie dye, batik, tjanting, embroidery, applique, embellishment.															
RM and TEXTILES	14	15	16	17	18	19	20	1	2	3	4	5	6		
	Making	Making	Making	Making	Painting	Strip heater	Evaluation	Materials – suitability for industry. PPE.	Sustainability of materials	Bunting – fabric pens graffiti style	Bunting Tie dye – skills. Batik skills	Bunting Block printing – skills	Bunting Embroidery – skills		
	Key Vocabulary/Concepts/ideas														
Coniferous, deciduous, polymer, timber, materials, thermoset, thermopolymer, thermo chromic, photo, chromic, acrylic, property, evaluation, textiles, fibres, synthetic, tie dye, batik, tjanting, embroidery, applique, embellishment.															
Textiles	7	8	9	10	11	12	13	14	15	16	17	18	19		
	Design brief – existing products apron	Design spec Designing assessment point	Designing CTG	Sewing machine skills	Making	Making	Making	Making	Making	Making Assessment point	Making CTG	Evaluation assessment point			
	Key Vocabulary/Concepts/ideas														
Coniferous, deciduous, polymer, timber, materials, thermoset, thermopolymer, thermo chromic, photo, chromic, acrylic, property, evaluation, textiles, fibres, synthetic, tie dye, batik, tjanting, embroidery, applique, embellishment.															
CIAG															
<ul style="list-style-type: none"> • Students required to place themselves in the shoes of designers when they receive their design briefs and follow through the process of designing, making and evaluating. • Students to gain experience of a real life workshop environment. • Students to explore the work of others to create a research document • Students are learning to react to a brief to create a usable product 															

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	1	2	3	4	5	6	7	8	9	10	11	12	13	
	Biomimicry – Animals and how they reflect on the products we use. Introduce design brief.	Design brief and Product Analysis. What is ACCESS FMM?	Product Analysis - Lamp research lesson.	Designers and the design process for manufacturing. computers required for mood boards	Design ideas, pupils use previous knowledge of product research to develop initial design ideas	Modelling – Theory and how to model products	Modelling Practical: Pupils design different cardboard models of their animal base.	Modelling: Testing models. Are they fit for purpose, do they need the design brief and specification, do they work as intended?	Marking out, how to fit everything from templates onto my final piece.	Making 1: Manufacture of timber pieces, hand finishing, applying finish to the timbers.	Making 1:	Electronics theory: Circuit maps and diagrams. Different circuits – heat, light, sound – how these can be used in products.	Making 2: Soldering of components to circuit board, fitting of circuit board and components to product.	
	Key Vocabulary/Concepts/ideas Design , Influence, Moral, Sustainability, Purchase, Specification, Evaluate, Analyse, Describe, Hem, Upcycle, Environment													
RM and Textiles	14	15	16	17	18	19	20	1	2	3	4	5	6	
	Making 2	Making 1 & 2	Sustainability: How can we be sustainable in our design?	Making 1& 2	Making 1 & 2	Evaluation: Evaluation of product against final brief and specification. Peer assessment of products.	CTG	Fashion design – market research	Sustainability of materials	Fashion designing – school uniform	Bunting Tie dye – skills. Batik skills	Bunting Block printing – skills	Bunting Embroidery – skills	
	Key Vocabulary/Concepts/ideas Design , Influence, Moral, Sustainability, Purchase, Specification, Evaluate, Analyse, Describe, Hem, Upcycle, Environment													
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Textiles	7	8	9	19	11	12	13	14	15	16	17	18		
	Design brief – market research and design spec school shirt bag	Designing Assessment point	Designing CTG	Making	Sewing machine lesson	Making	Making	Making	Making	Making	Making Assessment point	Making CTG	Evaluation assessment point	
	Key Vocabulary/Concepts/ideas Design , Influence, Moral, Sustainability, Purchase, Specification, Evaluate, Analyse, Describe, Hem, Upcycle, Environment													
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<p>Students required to place themselves in the shoes of designers when they receive their design briefs and follow through the process of designing, making and evaluating. Students to gain experience of a real life workshop environment. Students to learn about the options in careers available in construction</p> <p>KS3 as a whole:</p> <ul style="list-style-type: none"> - Linking curriculum learning to careers and real life - Encounters with employers and employees - Experiences of workplaces - Encounters with FE and HE - Personal guidance - Guest speakers and/or presentations 														

- Career sector assemblies/visits
- Year 9 careers events