



Academic Learning Plan
Design and Technology
 Year 9

Intent: Building upon prior learning, pupils will develop their skills and knowledge to create commercially viable products. They will respond to briefs and work to specifications. They will have an awareness of scales of production and commercial manufacturing processes. Their manufacturing processes become more complex.



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9 Units	Unit 1: Collaborative Design Pupils will work in teams to form their own business and respond to a live brief. Pupils will explore key roles of creating and selling their products. They will produce prototypes and present their design ideas to others. They will learn scales of manufacturing.		Unit 2: Felting Pupils will research the work of others and produce samples of these to inspire a final textile design. There will be a focus on theory and pupils will learn the dying process. To present their textile outcomes, pupils will produce a timber frame with mitre joints.		Lighting Pupils will focus on metals and electronics within this unit to create a functioning light. They will investigate the work of Alessi.	
Content	<ul style="list-style-type: none"> Collaborative design Responding to a brief Working to specifications Product Analysis Investigating the work of others Sustainability Automation Scales of production Prototyping Marketing Communicating design ideas Evaluation 		<ul style="list-style-type: none"> Freehand embroidery (Sewing machine) Hand embroidery Wet felting Needle felting Artist research Sampling Evaluation Mitre joints 		<ul style="list-style-type: none"> Classification of metals Metals and their properties Cutting, forming, drilling and joining metals Drawing electrical circuits Reading electrical diagrams Creating electrical circuits Resistors Electrical components 	
Literacy	<ul style="list-style-type: none"> Keywords on front of booklet Specifications Product Analysis – ACCESS FM Silent Starters/Homework tasks/Class discussion 		<ul style="list-style-type: none"> Keywords on front of booklet Analysing the work of others Critical reflection Silent Starters/Homework tasks/Class discussion 		<ul style="list-style-type: none"> Keywords on front of booklet Properties of materials Sequencing Silent Starters/Homework tasks/Class discussion 	
Knowledge organiser	Specific to this unit. Available for pupils on Teams.		Specific to this unit. Available for pupils on Teams.		Specific to this unit. Available for pupils on Teams.	
Assessment	Explore - research	Create – Consistency/Quality control/innovation/response to brief/teamwork. Technical Knowledge – Scales of production/Automation/Prototyping	Explore – the work of others. Technical Knowledge – fibres and fabrics	Create – outcome/Colour/Texture/Surface design/durability. Evaluate - sampling.	Technical knowledge – metals and their properties	Create – working circuit/finishing of lamp/net/forming. Technical Knowledge – electrical circuits
GCSE AO Link (AQA D&T)	AO1 AO2 AO3 AO4		AO1 AO2 AO3 AO4		AO1 AO2 AO3 AO4	
Homework	1. Sustainable materials 2. Prototyping (3D printing) 3. Scales of production	4. Automation 5. Commercial manufacturing 1 6. Commercial manufacturing 2	1. Fibres and fabrics 2. Colour research 3. Dying	4. Embroidery Artist 1 5. Embroidery Artist 2 6. Evaluation	1. Mood board 2. Types of Metals 3. Properties	4. Electrical circuits 5. Resistors 6. Evaluation
CEIAG	Time Management, Team Working, Financial planning; Creative thinking skills; Decision making; Planning; Originating new ideas; Adaptability and imagination; Setting goals; Communicating ideas.		Creative risk; Time Management; Creative thinking skills; Decision making; Planning; Originating new ideas; Adaptability and imagination, Abstract thinking		Systems thinking; Time Management; Creative thinking skills; Decision making; Planning; Originating new ideas; Adaptability and imagination.	