



**Academic Learning Plan
Design and Technology
Year 8**

Intent: During year 8, pupils focus on conducting their own research prior to the designing stage to encourage their individuality, innovation and creativity. Such tasks include analysing existing products and the work of others. A greater emphasis is also placed on critical evaluation of their own work so that they can make informed choices and produce high quality outcomes. Pupils widen their knowledge of materials by been introduced to smart, modern, composite and technical materials.



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 8 Units	Unit 1: Design Movements and Mechanisms Pupils will investigate the technological development of the clock over time and analyse existing products. They will research key design movements and design a clock inspired by this, which they will then manufacture. Pupils will learn core knowledge of powering systems and mechanisms.		Unit 2: Print and Pattern Pupils will be introduced to perspective drawing, ergonomics and anthropometrics. They will be creating a mobile phone holder in the style of a deckchair for Ikea. Fabric designs will be inspired by Marimekko and printed in thermochromic inks which will introduce pupils to smart materials.		Unit 3: Architecture Building upon the perspective drawing they have learnt in unit 2, pupils will design a building to scale. They will learn how to utilise research and to design for the needs of a client. Pupils will be able to utilise their knowledge of powering systems and smart materials. They will include structural knowledge in their design.	
Content	<ul style="list-style-type: none"> Comparing five key design movements, Arts and Craft; Art Nouveaux; Art Deco; Pop Art; Memphis. Cutting, shaping, joining and finishing timber and polymer. Working safely in a workshop. Technological development of the clock Product Analysis Powering Systems and Mechanisms 		<ul style="list-style-type: none"> Swedish design Smart and technical materials Ergonomics/Anthropometrics Perspective drawing Following a plan of manufacture Designing with specifications Screen printing Pattern 		<ul style="list-style-type: none"> Model making Paper and Board Biomimicry Modern and Composite materials Primary research Secondary research Scale Structures 	
Literacy	<ul style="list-style-type: none"> Keywords on front of booklet Adjectives to describe design movements. Product Analysis – ACCESS FM Silent Starters/Homework tasks/Class discussion 		<ul style="list-style-type: none"> Keywords on front of booklet Reading and following instructions Evaluating samples Silent Starters/Homework tasks/Class discussion 		<ul style="list-style-type: none"> Keywords on front of booklet Conducting primary research Analysing the work of others Silent Starters/Homework tasks/Class discussion 	
Knowledge organiser	Specific to this unit and available to pupils on teams.		Specific to this unit and available to pupils on teams.		Specific to this unit and available to pupils on teams.	
Assessment	Explore – final design informed by research. Well drawn. Evaluate – ACCESS FM	Create – Working safely/ selecting correct tools. Technical Knowledge – Powering systems/Polymers/Mechanisms	Explore and Evaluate – Sampling Technical knowledge – perspective drawing	Create – Working safely/following instructions/accurately. Technical knowledge – smart materials/ergonomics/anthropometrics	Explore – primary research. Technical knowledge – perspective drawing	Create – scaled model. Technical knowledge - structures
GCSE AO Link (or other) if applicable	AO1 AO2 AO3 AO4		AO1 AO2 AO3 AO4		AO1 AO2 AO3 AO4	
Homework	1. Moodboard 2. Technological development 3. ACCESS FM	4. Mechanisms 5. Finishes 6. Powering systems	1. Marimekko 2. Ergonomics/Anthropometrics 3. Perspective Drawing	4. Screen printing 5. Smart/Technical Materials 6. Product/Fabric testing	1. Zaha Hadid 2. Buildings of tomorrow 3. Perspective/Scaled drawing	4. Structures 5. Modern & composite materials 6. Paper and Board
CEIAG	Time Management, Sequencing, Creative thinking skills; Decision making; Planning; Originating new ideas; Adaptability and imagination; Setting goals; Conveying feelings; Capacity for curiosity.		Time Management, Sequencing, Creative thinking skills; Decision making; Planning; Originating new ideas; Adaptability and imagination; Setting goals; Conveying feelings; Capacity for curiosity.		Time Management, Sequencing, Creative thinking skills; Decision making; Planning; Originating new ideas; Adaptability and imagination; Setting goals; Conveying feelings; Capacity for curiosity.	