

Curriculum Overview: Design Technology

Year Group	Content overview Cycle 1	Content overview Cycle 2	Content overview Cycle 3
5	Gumball Dispensing Machine <ul style="list-style-type: none"> • Card modelling / Prototyping • Mechanisms 	Bridges <ul style="list-style-type: none"> • Designing, making and testing bridge structures • Adding strength and stability to structures 	Shakespeare's Globe <ul style="list-style-type: none"> • Scale model making of a well-known architectural structure • Set design
	Food & Nutrition Immersion Day: Guacamole with tortilla chips (Mayans – Hist/Eng)	Food & Nutrition Immersion Day: Eggless sponge cake (WW2 – Hist/Eng)	Food & Nutrition Immersion Day: Seasonal veg pizzas (Communities – Geog)
6	LED Torch Project <ul style="list-style-type: none"> • Circuit building / component identification • Introduction to workshops tools and equipment 	Viking Longships <ul style="list-style-type: none"> • Scale modelling to create a realistic product • Figure modelling in the style of Giacometti 	Great Chinese Inventions <ul style="list-style-type: none"> • Influence and impact of inventions designed in ancient China • Designing and making a working product influenced by Chinese culture • Testing materials for their properties
	Food & Nutrition Immersion Day: Victoria sponge (Victorians – Hist/Eng)	Food & Nutrition Immersion Day: Jerk chicken kebabs with mango salsa (Windrush – Hist/Geog)	Food & Nutrition Immersion Day: Greek meatballs with tzatziki (Greece – Hist/Geog)
7	Food & Nutrition <ul style="list-style-type: none"> • Healthy and varied diet • Importance of nutrition • Cooking for various needs/wants/values 	Graphics: Mobile Phone Stand <ul style="list-style-type: none"> • CAD/CAM • Polymer line bending • Designing to solve a real-world problem 	RMT: Chocolate Tray and Packaging <ul style="list-style-type: none"> • Thermoforming process / net design and manufacture • Designing for a user • Designing to solve a real-world problem
8	Food & Nutrition <ul style="list-style-type: none"> • Making informed healthy choices • Range of preparation techniques • Modifying recipes in order to cook healthier dishes 	Graphics: POS Display <ul style="list-style-type: none"> • CAD/CAM • Adding strength to scale structures • Designing to solve a real-world problem 	RMT: Charles Rennie Mackintosh Inspired Jewellery <ul style="list-style-type: none"> • Casting process • CAD/CAM • Designing to solve a real-world problem
9	Food & Nutrition	Graphics: Wooden Clock Project <ul style="list-style-type: none"> • CAD/CAM • Designing to solve a real-world problem • Research and design. 	Electronics <ul style="list-style-type: none"> • Lighting inspired by De Stijl design movement • CAD/CAM • Circuit building/components RMT: Wooden Storage Box <ul style="list-style-type: none"> • Joining and strengthening wood • Designing for a target market
10	Theory	Theory	NEA Preparation and release of Contextual Challenge.

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	<ul style="list-style-type: none"> Core content delivery <p>Practical</p> <ul style="list-style-type: none"> Wooden Joints Project Using hand tools and finishing techniques to create a series of wood joints. Research, design and evaluate. 	<ul style="list-style-type: none"> Subject specific (Timbers) content delivery <p>Practical</p> <ul style="list-style-type: none"> Metal Craft Project Use of metal work tools and equipment to make a metal bracket project using mild steel. Research, design and evaluate. 	<ul style="list-style-type: none"> Preparation for contextual challenge release. Contextual challenge release 1st June 2025 - prepare, investigate and design in relation to chosen topic.
10 -food			
11	<p>NEA Contextual Challenge</p> <ul style="list-style-type: none"> Investigate, design and modelling. Begin practical elements in relation to contextual challenge. 	<p>NEA Contextual Challenge</p> <ul style="list-style-type: none"> Continuation of practical elements in relation to contextual challenge - final deadline prior to end of term. Evaluation of final product in relation to the contextual challenge. 	<p>GCSE Revision and submission of Contextual Challenge</p> <ul style="list-style-type: none"> Revision of core and theory content. GCSE past papers Submission of NEA contextual challenge/moderation.