



Years 10 & 11 Curriculum

GCSE: Design & Technology



Year 10	Term 1 (Autumn)		Term 2 (Spring)		Term 3 (Summer)	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Exam Theory / Subject Knowledge, Including Practical	Exam Theory / Subject Knowledge, Including Practical	Exam Theory / Subject Knowledge, Including design and make project	Exam Theory / Subject Knowledge, Including design and make project	Exam Theory / Subject Knowledge	Live NEA Project: Research, Design, Make & Evaluate
Key Concepts	- Timbers - Polymers - Material properties - Sources and origins - Joining - Fixings/adhesives - Manufacturing - Forming - Finishes - Practical skills with timbers and polymers	- Metals - Papers and boards - Textiles - Material properties - Sources and origins - Joining - Fixings/adhesives - Manufacturing - Forming - Finishes - Practical skills with polymers, metals, and textiles	- Designers - Design eras - Design sketches - Developments - Models - Developments - Research and disassembly - Design strategies - Social, moral, cultural, economic, and environmental factors - Mini project	- Sketching skills - Presentation skills - Design specification - Orthographic drawing - Exploded views - Industry and enterprise - The Impact of new and emerging technology - Composites and Smart/modern materials - Mini project	- Composites and Smart/modern materials - Energy, including fossil, energy recovery and green energy - Electronics - CAD - Forces and stresses - Mechanical devices	- Maths - Brief - Analysis on topic - Research - Social, moral, cultural, economic, and environmental factors - Design

Year 11	Term 1 (Autumn)		Term 2 (Spring)		Term 3 (Summer)	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Live NEA Project: Research, Design, Make & Evaluate Skills	Live NEA Project: Making Skills	Live NEA Project: Making & Evaluating Skills	Exam Theory / Subject Knowledge	Revision	
Key Concepts	- Brief and analysis - Research - Specification - Designs	- Designs - Modelling - Evaluation against specification - Developments - CAD - Final design - Manufacturing specification	- Making prototype - Diary of make - Testing - Evaluation - Modifications	- Exam paper - Class walking-talking mock based on exam paper - Industry - Enterprise - Sustainability, including planned obsolescence - Technology push/Market pull & social affects	- Exam preparation techniques - Large mark question techniques - Forming - Topics identified in QLA's - Walking-talking mock	

NEA = Non-Examined Assessment



Years 10 & 11 Assessment

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All pupils will sit several knowledge tests and a mock examination in Year 10. In Year 11, pupils will sit an assessment and a mock examination.

	Year 10		Year 11		Revision Resources
	Knowledge Tests	Mock Exam	Assessment	Mock Exam	
	Autumn/Spring Terms	Summer Term	Autumn Term	Autumn Term	
Style of Assessment	Each knowledge test will consist of 20 multiple-choice questions	Written exam paper consisting short answers, analysis, and extended response questions	Written exam paper consisting of short answers, analysis, and extended response questions	Written exam paper consisting of short answers, analysis, and extended response questions	Kennet Resources - Core Questions - Knowledge Organisers - Learning Habits External Resources www.bbc.com/bitesize http://technologystudent.com
Topics Assessed	Core knowledge taught until that point in the academic year	- Systems - Forces - Materials - Scale of production - Material properties - Mathematics - Lifecycle - Renewable energy - Processes - Social design - Anthropometrics and ergonomics - Isometric drawing - Orthographic drawing - Tessellation	- Systems - Forces - Materials - Scale of production - Material properties - Mathematics - Lifecycle - Renewable energy - Processes - Social design - Anthropometrics and ergonomics - Isometric drawing - Orthographic drawing - Tessellation	- Systems - Forces - Materials - Scale of production - Material properties - Mathematics - Lifecycle - Renewable energy - Processes - Social design - Anthropometrics and ergonomics - Isometric drawing - Orthographic drawing - Tessellation	