

Subject: Design & Technology

Year group: 11

Department Curriculum Vision: *GCSE D&T at Northwood consists of a range of creative, imaginative and innovative experiences of designing and practical based activities using a range of materials from three main areas: timber, metal-based materials and polymers.*

	Autumn Term	
	GCSE NEA COURSEWORK NEA 50% GCSE	Exam Paper Revision
Content: (Know what...)	<u>Design & Make a product</u> The NEA (Non-Exam Assessment) coursework component of the AQA Design Technology GCSE provides students with the opportunity to apply their theoretical knowledge and practical skills in a project-based context. This coursework is worth 50% of the students GCSE assessment, allowing students to demonstrate their ability to research, design, develop, and manufacture a product that meets a specific need or solves a particular problem. The NEA encourages creativity, critical thinking, and project management skills.	<u>Knowledge content for GCSE</u> The Autumn term is used to support and guide students to effectively answer exam-style questions for the AQA Design and Technology GCSE course. It focuses on understanding question types, developing structured responses, and mastering key content areas.
Skills: (know how...)	Section A - Identifying & investigating design possibilities Section B - Producing a Design Brief and Specification Section C - Generating Design Ideas Section D - Developing Design Ideas Section E - Realising Design Ideas Section F - Analysing and Evaluating	• Understanding the Exam Format and Question Types • Tackling Multiple Choice and Short Answer Questions • Structuring Extended Response Questions • Applying Design Principles in ResponsesEvaluating and Analysing Designs • Reviewing Key Topics and Final Practice

Key vocabulary	• Design Brief • Design Specification • Primary Research • Secondary Research • Idea Generation • Sketching • Prototyping • Computer-Aided Design • Iterative Development	• Manufacturing • Materials Selection • Tools and Equipment • Safety • User Needs • Market Analysis • Evaluation • Testing	• New and emerging technologies • Energy generation and storage • Developments in new materials • Systems approach to designing • Mechanical devices • Materials working properties • Selection of Materials and Components • Forces and Stresses • Ecological and Social Footprint • Sources and Origins • Tolerances • Material Management • Tools and Equipment
Mid Term Assessment	Ongoing assessment. Each section marked and whole class feedback given for improvements to be made		
End Term Assessment			December - PPE 1 Assessment
	Spring Term		
	GCSE NEA COURSEWORK NEA 50% GCSE		Exam Paper Revision

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Skills: (Know how...)	Section A - Identifying & investigating design possibilities Section B - Producing a Design Brief and Specification Section C - Generating Design Ideas Section D - Developing Design Ideas Section E - Realising Design Ideas Section F - Analysing and Evaluating		• Understanding the Exam Format and Question Types • Tackling Multiple Choice and Short Answer Questions • Structuring Extended Response Questions • Applying Design Principles in ResponsesEvaluating and Analysing Designs • Reviewing Key Topics and Final Practice
Key vocabulary	• Design Brief • Design Specification • Primary Research • Secondary Research • Idea Generation • Sketching • Prototyping • Computer-Aided Design • Iterative Development	• Manufacturing • Materials Selection • Tools and Equipment • Safety • User Needs • Market Analysis • Evaluation • Testing	• Using and Working with Materials • Stock Forms, Types, and Sizes • Scales of Production • Specialist Techniques and Processes • Surface Treatments and Finishes • Investigation, Primary and Secondary Data • Environmental, Social, and Economic Challenge • The Work of Others • Design Strategies • Communication of Design Ideas • Prototype Development • Selection of Materials and Components

End Term Assessment	Deadline for NEA coursework is March. NEA Final Assessment	March - PPE 2 Assessment
	Summer 1	
	Exam Paper Revision	
Content: (Know what...)	The Spring term continues to support and guide students to effectively answer exam-style questions for the AQA Design and Technology GCSE course. It focuses on understanding question types, developing structured responses, and mastering key content areas.	
Skills: (Know how...)	• Understanding the Exam Format and Question Types • Tackling Multiple Choice and Short Answer Questions • Structuring Extended Response Questions • Applying Design Principles in ResponsesEvaluating and Analysing Designs • Reviewing Key Topics and Final Practice	
Key vocabulary	• New and emerging technologies • Energy generation and storage • Developments in new materials • Systems approach to designing • Mechanical devices • Materials working properties • Selection of Materials and Components • Forces and Stresses • Ecological and Social Footprint • Sources and Origins	• Using and Working with Materials • Stock Forms, Types, and Sizes • Scales of Production • Specialist Techniques and Processes • Surface Treatments and Finishes • Investigation, Primary and Secondary Data • Environmental, Social, and Economic Challenge • The Work of Others • Design Strategies • Communication of Design Ideas

	• Tolerances • Material Management • Tools and Equipment	• Prototype Development • Selection of Materials and Components
Additional information		
Homework	• Practice identifying the command words in past paper questions. • Complete a mix of multiple choice and short answer questions • Timed practice of multiple choice and short answer questions. • Outline and write responses to extended response questions. • Answer questions that require application of design principles. • Write responses to questions requiring evaluation and analysis • Complete a full past exam paper under timed condition	
Extra curricular and enrichment opportunities	NEA Surgery Sessions Afterschool, half term holiday and on Saturday interventions	
Useful links that will support learning	AQA Design and Technology GCSE Textbook - AQA GCSE Design & Technology: Timber, metal-based materials and polymers ClearRevise AQA GCSE Design and Technology 8552	
How parents can support learning	All pupils must be equipped with drawing and colouring equipment. Purchasing ClearRevise revision guide.	