

Year 10 PPE Technology Revision plan

SECTION A

Multiple choice and 2-4 mark questions

General revision: Co-operatives, crowdfunding, renewable energy, designing for maintenance, biodegradable materials, paper and board, materials, mechanisms, global warming,

SECTION B – Specialist technical principles

2-6 mark questions whilst also combining knowledge of materials – be sure to pick the correct product or material when choices have to be made, avoid textiles questions where you can.

Revision Plan – use with topic list

TASK	Topic Area	Web link	Activity	Pages in CGP revision guide
1	Properties of materials	Physical and working properties - Material categories and properties - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	<p>Are you able to use the following words when defining materials?</p> <p>Do you understand what they mean?</p> <ul style="list-style-type: none"> • Strength • Hardness • Toughness • Ductility • Elasticity • Malleability • Electrical conductivity • Thermal conductivity • Fusibility, Density 	15-20. 52
2	Paper & Boards	Paper & Boards - Design & Technology: AQA GCSE	<p>Are you able to state how paper is measured and name and explain different types of paper.. layout, cartridge, bleedproof etc.</p> <p>Are you able to describe different types of board/cardboard, their properties and their uses.</p>	17
3	Quality Control	Technology student link Quality Control (technologystudent.com)	What is Quality Control?	42,43
	Tolerances	Accuracy and quality control - Electronic and mechanical systems - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Can you describe three different quality control tests?	
			If a material has a tolerance on a size. What does this mean?	42
	Production aids	Measurement and Production Aids - AQA GCSE Design & Technology	Jigs, fixtures, patterns – how can these aids help when making more than one?	44,45
4	Stock Forms Sources of materials	BBC bitesize link Stock forms, types and sizes - Timber-based materials - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Why are stock forms important when designing?	64,65

		Sources of materials PP PowerPoint Presentation (technologystudent.com)	Are you able to describe where materials come from and how they are processed into their stock forms? Tree – paper Tree – wood Ore – metal Oil – plastic	46,47,48
--	--	---	--	----------

SECTION C – Designing and making principles

Drawing tasks, extended answer questions and mathematical questions

5	Analyse & Evaluate Electrical and Mechanical Systems & processes	Youtube clip GCSE D&T exam walkthrough - Design question. (youtube.com)	Analyse: Separate information into components to identify their characteristics Evaluate: Judge from available evidence You need to be confident at finishing off a systems diagram and be able to identify input, process and outputs	111 25-31
6	Surface finishes Third Angle drawing	Technology student link FINISHES - WOODS, METALS AND PLASTICS (technologystudent.com) BBC Bitesize link Working drawings - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Understand the different reasons why surface finishes are required whilst also being able to list different finishes for different materials You have to be able to draw in plan, front and end views to break apart a complex 3 dimensional shape	76,77 115-118