Exam Board	Recommended revision guide	Support available in school
Pearson Edexcel		Lunchtimes C101

Design and Technologyy - Timbers

Revision Schedule 2025 - 26

Useful online resources	Exam date
https://senecalearning.com/en-GB/ - Seneca revision https://revisionworld.com/gcse-revision/design-technology/gcse-design-and-technology-past-papers-0/edexcel-gcse-design-and-technology-past-papers - Past papers https://www.bbc.co.uk/bitesize/examspecs/zb6h92p - Core content, materials and NEA information. https://studyrocket.co.uk/revision/gcse-design-and-technology-edexcel	Wednesday 10th June – Afternoon

September					
Week beginning…	**Topic**	**Content to revise**	**Complete (tick)**	**Knowledge test score**	**Weeks left**
Monday 8th	1.1 The impact of new and emerging technology	Industry (1.11), Enterprise (1.12), Sustainability (1.13), People (1.14), Culture (1.15), Society (1.16), Production techniques (1.17 & 1.18).			32
Monday 15th	1.2 Evaluation of New and Emerging Technology	• Critical evaluation of new and emerging technologies (1.21) e.g. budget, time scale, materials, etc. • How they can be used in contemporary and potential future scenarios – e.g. natural and medical disasters, travel, etc. • Ethics – where it was made and who by? Fair trade? • Environment – Carbon footprint, life cycle analysis (LCA), transportation.			31
Monday 22nd	1.3 Energy Generation, Storage and Sources	• Non-renewable sources, advantages and disadvantages • Renewable sources, advantages and disadvantages (1.31) • Powering systems – examples, advantages and disadvantages (1.32)			30
Monday 29th	1.4 Smart and Composite Materials, and Technical Textiles	Examples, advantages and disadvantages of the following: • Modern and smart materials • Composite materials • Technical Textiles			29
October					
Monday 6th	1.5 Mechanical Devices	• Types of movement (1.51) • Classification of levers and calculating mechanical advantage (1.52a) • Linkages (1.52b) • Cams and followers (1.53) • Pulleys and belts (1.54) • Cranks and sliders • Gears and calculations (1.5a & 1.5b)			28
Monday 13th	1.6 Electronic Systems	The role, applications, advantages and disadvantages of the following: • Sensors – LDRs and thermistors. • Control devices – switches, transistors and resistors. (1.61) • Outputs – Buzzers and LEDs. (1.62)			27

Monday 20th	1.7 Programmable Components	• Using flowcharts. • Switching outputs on and off. • Processing analogue inputs. • Simple routines to control outputs – delays, loops and counts. (1.7)			26
Monday 27th	1.8 Ferrous and Non-Ferrous Metals	You must know about each of the following: • What is a ferrous metal and examples. • What is a non-ferrous metal and examples. • Properties of the above and their meanings. (1.8)			25
November					
Monday 3rd	1.9 Papers and Boards	You must know about each of the following: • Papers and examples. • Boards and examples. • Properties of the above and their meanings. (1.9)			24
Monday 10th (Mock Week 1)	7.1 Design Context 7.2 Sources of Timber **Origins (7.24)**	When designing or modifying a product, you should have knowledge of timbers, where they come from and why materials have changed overtime. Geographical origin of softwoods and hardwoods, with examples from the following: • Cold climates (Alpine) • Temperate climates (European) • Tropical Rainforests (Amazonian)			23
Monday 17th (Mock Week 2)	7.2 Sources of Timber **Hardwoods (7.21)**	Where hardwoods come from Knowledge of at least 3 hardwoods Advantages, disadvantages and properties.			22
Monday 24th	7.2 Sources of Timber **Softwoods (7.22)**	Where softwoods come from Knowledge of at least 3 softwoods Advantages, disadvantages and properties.			21
December					
Monday 1st	7.2 Sources of Timber **Manufactured (7.23)**	What is manufactured board? Knowledge of at least 2 manufactured boards Advantages, disadvantages and properties.			20

Monday 8th	7.2 Sources of Timber **Characteristics (7.25)**	Knowledge of: • Knots • Colour • Grain Structure • Density			19
Monday 15th	**Working Properties (7.26)**	Definitions of: • Hardness • Toughness • Durability • Elasticity • Tensile Strength • Compressive Strength			18
January					
Monday 5th	7.2 Sources of Timber **Social Footprint (7.27)**	Definitions and examples of: • Trend forecasting. • The impact of logging on communities. • Recycling and disposal			17
Monday 12th	**Ecological Footprint (7.28)**	Define what ecological footprint is. Definitions and examples of the following: • Sustainability • Deforestation • Habitat destruction and loss • Processing • Transportation • Wastage • Pollution			16
Monday 19th	7.3 Selection of Timbers **Aesthetic Factors (7.31)**	• Knowledge of the 3 aesthetic factors affecting product design and thus the selection of the timbers.			15
Monday 26th (Mock Week 1)	**Environmental Factors (7.32)**	• Environmental factors – Sustainability, Genetic engineering, Seasoning and Upcycling			14
February					

Monday 2nd (Mock Week 2)	**Availability Factors (7.33)**	• Availability Factors – Stock Materials, Specialist Materials and Hurricanes, Storms and Disease.			13
Monday 9th	7.3 Selection of Timbers **Cost Factors (7.34)**	• Cost Factors – Quality of material, Manufacturing processes and Treatments.			12
Monday 16th	**Social Factors (7.35)**	• Social Factors – Social groups, Trends and Popularity.			11
Monday 23rd	**Cultural/Ethical Factors (7.36)**	• Cultural/Ethical Factors – Avoiding Offence, Suitability for the market, Consumer society, Mass production, Built-in obsolescence.			10
March					
Monday 2nd	7.4 Strengthening Timber	Knowledge of: • Forces and Stresses – Compression, tension, shear, natural forces and pre-stressed construction beams. • Reinforcement Techniques – Frame structures, fabrication/assembly, lamination, braces/tie bars and embedding composite materials.			9
Monday 9th	7.5 Stock forms and Sizes	Stock Forms – Regular sections, Mouldings, Dowels and Sheets Sizes – PAR, PSE, Cross-sectional Area, Diameter and Board Sizes.			8
Monday 16th	7.8 Surface Finishes and Treatments	Knowledge of: **Painting, Staining, Varnishing, Wax, Oil, Shellac, Veneering.**			7
Monday 23rd	7.6 Manufacturing Processes **Cutting and Shaping Material (7.61)**	When to use the following processes: **Routing, Sawing, using a Mortise, and using a bag press.**			6
Monday 30th	**Scale of Production (7.62)**	Definitions, advantages and disadvantages of scales of production – **One off, Batch, Mass Production, Continuous.**			5
April					

Monday 6th	7.6 Manufacturing Processes **Techniques for quantity production (7.63)**	• Methods of marking-out. • Jigs • Fixtures • Templates • Patterns • Sub-assembly • Computer-Aided Manufacturing (CAM) • Quality control Working within tolerance • Efficient cutting to minimise waste.			4
Monday 13th	7.7 Equipment/Processes Used to Make Prototypes **Tools and Equipment (7.71)**	Knowledge of what the following equipment/processes are used for and how to use it safely: • Hand tools, Machinery, Digital design and manufacture. • Drilling, Cutting, Planing, Chiselling, Turning, Abrading, Carving and Rasps/surforms.			3
Monday 20th	**Shaping (7.72)**				2
Monday 27th	**Fabricating/Constructing (7.73)**	Knowledge of the following processes: • Lamination, Veneering, using screws, Nailing, using adhesives, Joints, wastage, and addition.			1
May					
Monday 4th	**Assembling (7.74)**	How to assemble products using: • Knock-down fittings, hinges, ironmongery.			0