

### D&T Theory Revision Checklist

Unit	Checklist Item	Revised
Unit 1	New and Emerging Technologies	
	Automation	
	Robotics on the workplace	
	Explain co-operative and fair trade practices	
	Understand sustainable development and resource management	
	Define technology push	
	Market pull	
	Evaluate planned obsolescence	
	Its impact	

Unit 2	Energy Generation	
	Renewable	
	Non-renewable energy sources	
	Kinetic pumped storage systems	
	Battery types	
Unit 2	Smart and Composite Materials	
	Modern	
	Smart	
	Composite materials	
	Their properties	
Unit 2	Systems and Control	
	Systems	
	Processes	
	inputs	
	Outputs	
Unit 2	Mechanisms	
	Motion	
	Levers	
	Linkages	
	Cams	
	Gears	
	Pulleys	

Unit 3	Materials and Properties: Identify sources	
	Paper	
	Timber	
	Metal	
	Polymers	
	Textiles	
Unit 3	Materials and Properties: Key physical properties	
	Absorbency	
	Density	
	fusibility	
	Explain key working properties: hardness	
	toughness	
	elasticity	

Unit 4	Forces and Stresses: Define	
	Tension	
	compression	
	torsion	
	bending	
	shear	
Unit 4	Reinforcement Techniques: Describe	
	Stiffening	
	lamination	
	folding	
	webbing	
	and interfacing	
Unit 4	Ecological and Social Footprint	
	Understand product mileage	
	Impact of raw material extraction	
Unit 4	Sustainability: Apply the 6 Rs	
	Reduce	
	Reuse	
	Recycle	
	Rethink	
	Refuse	
	Repair)	
Unit 4	Production Methods: Differentiate between	
	prototype	
	Batch	
	Mass	
	Continuous production	

Unit 5A	Paper and Board: recognise and understand different types of	
	Paper	
	Board	
	Applications	
Unit 5A	Working with Paper and Board: Explain processes	
	cutting	
	creasing	
	scoring	
	forming	
Unit 5A	Understand	
	Printing techniques	
	Surface Finishes	
	quality control marks	

Unit 5B	Timbers: Explain processes of	
	harvesting	
	conversion	
	seasoning	
Unit 5B	Stock Forms and Fixings: Identify	
	Timber forms	
	knock-down fittings	
Unit 5B	Surface Treatment: Describe processes	

	Finishing	
	Auality checks	

Unit 5D	Polymers: Understand	
	polymer origins	
	fractional distillation	
	types	
Unit 5D	Forming and Finishing: Explain	
	moulding techniques	
	surface finishing	

Unit 5E	Textiles: Descirbe & understand	
	Fibre sources	
	Weaving	
	Knitting	
Unit 5E	Textile Techniques: Identify, desicrbe & understand	
	Sewing	
	Draping	
	Pleating	
	Gathering	
	Quilting	
	Piping	
Unit 5E	Commercial Processes: Explain	
	Dyeing	
	Printing	
	Quality control	

Unit 6	Research: Understand the difference	
	Primary data	
	Secondary data	
Unit 6	Anthropometrics and Ergonomics: Apply	
	Ergonomic data to design	
	Apply anthropometric	
Unit 6	Design Strategies: Define	
	Iterative design	
	User-centred	
	Dollaborative	
Unit 6	Communication: Draw in	
	Orthographic	
	Isometric	
	Oblique	
	perspective views (1 point, 2 point)	

Unit 7	Material Selection: Select materials based on	
	Cost	
	Function	
	Availability	
Unit 7	Tolerances and Marking	

	Use datum points	
	marking out techniques accurately	
Unit 7	Tool Use and Safety: Use specialist tools safely	
	Safely	
	Correctly	
Unit 7	Surface Finishing: apply finishes	
	For functional	
	Aesthetic purposes	