

GCSE Engineering

Unit 2 Choosing materials, parts and components

Product _____

Materials	Metals	Ferrous alloys & non-ferrous alloys
	Polymers	Thermosetting & Thermoplastic
	Ceramics	
	Composites	Bi-metal, carbon, sintered
Properties	Ability to be formed: Bending, coiling, forging, casting,	Tensile strength, Toughness, Malleability, Ductility, Hardness
	Treatment processes	Hardening, Blacking etc
	Electrical properties	
	Surface finishing	
	Handling factors	
	Cost	
Mechanical Components	Availability	
	Nuts	
	Bolts	
	Screws	
	Rivets	
	Pins	
	Clips	
Electrical and Electronic Components	Keys	
	Resistors, fixed and variable	
	Capacitors	
	Bulbs, LEDs	
	Diodes	
	Wire	
	Cable	
	Insulators	
	Batteries	
	Motors	
	Buzzers	
Thermistors		
Pneumatic/ hydraulic	Transistors	
	Valves	
	Cylinders	
	Reservoirs	
	Filters	