

# GCSE Engineering

## Unit 1 Design and Graphical Communication

Product \_\_\_\_\_

Design Briefs	Function	Explain how your design meets the requirements of the persons who will end up using it.
	Quality standards	
	Styling	Abstract or replica
	Performance	Speed, manoverability, reliability
	Market	Competition
	Size approx	
	Maintenance	End user servicing
	Appropriate Production methods	
	Cost	Design, production
	Regulations	Batteries, materials handling
	Scale of production	Mass, batch, one off
Specifications and Solutions	Research and analysis	Select an area for information seeking: Materials, including components, circuit design and manufacture, case designs for different situations.
	Scientific principles	Structural analysis, Power demands etc
	Generation of ideas	Decide what it might be best to start modifying or completely engineering from scratch. Put your ideas down on paper. Start with system designs.
	Evaluation of ideas	You must do your drawings to an appropriate scale.
	2D & 3D sketching	You must include both manual and CAD drawings
	Modelling techniques	