



DT6 Metal-based materials

Personal learning checklist | 1 of 2

AQA GCSE Design and Technology 8552 | Written examination · Specialist area · Metal-based materials

Name _____ Class _____ Date _____

Tick one box for each statement. Red: need help. Amber: partly confident.
Green: can do independently.

Use your taught examples and supervised practical evidence. Quick checks support concepts; design and making need demonstration and judgement.

I can	Red	Amber	Green
Sources and properties			
Explain extraction, refining and the value of sorted metal recovery.	☐	☐	☐
Select ferrous metals for brackets, tools and utensils.	☐	☐	☐
Compare aluminium, copper, zinc, brass and bronze for an application.	☐	☐	☐
Explain annealing and suitable steel hardening/tempering.	☐	☐	☐
Stock and forming			
Specify sheet, bar, rod, tube and compatible mechanical fixings.	☐	☐	☐
Explain safe cutting, shearing, drilling and deburring with datums.	☐	☐	☐
Compare turning and milling with accurate workholding and checks.	☐	☐	☐
Explain casting and choose appropriate tooling for production volume.	☐	☐	☐
Allow for bend radius, springback and dimensional accuracy.	☐	☐	☐
Compare mechanical fastening, soldering, brazing and welding.	☐	☐	☐

My next revision priority _____

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I can	Red	Amber	Green
Quality and finishing			
Check dimensional accuracy and identify potential hidden defects.	☐	☐	☐
Prepare and compare galvanising, powder and dip coatings.	☐	☐	☐
Distinguish anodising from polishing and justify surface treatment.	☐	☐	☐
Evaluate durable repairable construction and alloy separation.	☐	☐	☐

My next revision priority _____