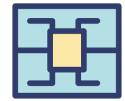


DT9 Specialist electronic and mechanical systems



Personal learning checklist | 1 of 2

AQA GCSE Design and Technology 8552 | Written examination · Specialist area · Specialist electronic and mechanical systems

Name _____ Class _____ Date _____

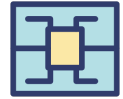
Tick one box for each statement. Red: need help. Amber: partly confident.
Green: can do independently.

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

I can	Red	Amber	Green
Selection and components			
Specify a system using function, environment, ratings, torque and speed.	☐	☐	☐
Select resistors and sensors using preferred values and tolerance.	☐	☐	☐
Interpret IC packages, microcontroller pinouts and stored instructions.	☐	☐	☐
Select drivers and motors allowing for starting/stalled current.	☐	☐	☐
Explain closed-loop behaviour and sensor placement limitations.	☐	☐	☐
Design mechanical alignment, clearance, lubrication and guards.	☐	☐	☐
Manufacture and assembly			
Prototype and test a safe low-voltage circuit on a breadboard.	☐	☐	☐
Explain controlled photosensitive PCB manufacture and chemical/UV safety.	☐	☐	☐
Explain drilling and soldering with suitable joint preparation and inspection.	☐	☐	☐
Compare pick-and-place, flow/wave and reflow assembly.	☐	☐	☐
Plan accurate chassis fabrication, wire protection and component access.	☐	☐	☐

My next revision priority _____

DT9 Specialist electronic and mechanical systems



Personal learning checklist | 2 of 2

AQA GCSE Design and Technology 8552 | Written examination · Specialist area · Specialist electronic and mechanical systems

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
Quality, finish and footprint			
Inspect polarity and use appropriate unpowered and powered tests.	☐	☐	☐
Test boundary behaviour and identify electrical/mechanical failure modes.	☐	☐	☐
Select compatible PCB lacquer, anodising and lubrication.	☐	☐	☐
Evaluate repairability, standby demand and electronic waste routes.	☐	☐	☐

My next revision priority _____