

DT2 Electronic systems and mechanisms



Personal learning checklist | 1 of 2

AQA GCSE Design and Technology 8552 | Written examination · Shared theory and skills

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
Systems and control			
Draw and explain input, process and output blocks for a control system.	☐	☐	☐
Explain LDR and NTC thermistor responses in a sensing circuit.	☐	☐	☐
Distinguish microcontrollers, integrated circuits and output drivers.	☐	☐	☐
Apply AND, OR and NOT decisions to a user requirement.	☐	☐	☐
Compare open-loop and closed-loop control using feedback.	☐	☐	☐
Develop and test a sequence with selection and iteration.	☐	☐	☐
Select and safely connect rated output components.	☐	☐	☐
Explain pressure sensing and programmed counting/timing applications.	☐	☐	☐

My next revision priority _____

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Personal learning checklist | 2 of 2

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I can	Red	Amber	Green
Motion and force			
Distinguish rotary, linear, reciprocating and oscillating motion.	☐	☐	☐
Draw and compare three lever classes with effort, load and fulcrum.	☐	☐	☐
Calculate moments and mechanical advantage with units and assumptions.	☐	☐	☐
Calculate gear ratio, speed and direction for meshing gears.	☐	☐	☐
Explain idler, rack-and-pinion and worm mechanisms.	☐	☐	☐
Explain belt direction, speed ratios, alignment and slip.	☐	☐	☐
Use cam profiles to explain follower rise, fall and dwell.	☐	☐	☐
Explain crank-slider and linkage movement with labelled drawings.	☐	☐	☐
Explain bell-crank and push-pull linkages, including rod/cable limitations.	☐	☐	☐

My next revision priority _____