

**Design & Technology**  
**AQA A-Level**

# **Manufacture, repair, maintenance and disposal**

## **Materials required for questions**

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- Pencil
- Rubber
- Calculator

## **Instructions**

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- Use black ink or ball-point pen
- Try answer all questions
- Use the space provided to answer questions
- Calculators can be used if necessary
- For the multiple choice questions, circle your answer

## **Advice**

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- Marks for each question are in brackets
- Read each question fully
- Try to answer every question
- Don't spend too much time on one question

**Good luck!**

**Q1.** Why might a designer reduce the number of manufacturing processes?

- A** To make the product heavier
- B** To lower production time and costs
- C** To increase material waste

**Q2.** What is the purpose of labelling materials for recycling?

- A** To make products look more expensive
- B** To help users separate components correctly
- C** To hide toxic ingredients

**Q3.** What does "rethink" in sustainability encourage?

- A** Using cheaper, non-recyclable plastics
- B** Switching to bamboo or biodegradable alternatives
- C** Ignoring energy consumption

**Q4.** Why use standardised parts in design?

- A** To simplify replacements and reduce costs
- B** To complicate repairs
- C** To make products unique

**Q5.** State three ways that manufacturers are improving sustainability throughout product manufacture **(3 marks)**

1.

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2.

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3.

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## **Answers**

**Q1. B**

**Q2. B**

**Q3. B**

**Q4. A**

**Q5.**

Sustainability can be improved by reducing:

- the number of manufacturing processes used
- the volume or quantity of raw materials used
- the use of finite materials by choosing a more environmentally friendly alternative
- the use of toxic materials or materials that can be damaging or harmful to the environment
- the use of finishes that may be harmful to the environment
- the amount of energy used in factories or manufacturing facilities by installing low energy lighting etc
- the amount of energy used that is generated from finite resources by seeking alternative sustainable sources.