**Design & Technology**

**AQA A-Level** Logo

Description automatically generated with low confidence

**Manufacture, repair, maintenance and disposal**

**Materials required for questions**

* Pencil
* Rubber
* Calculator

**Instructions**

* 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**

* 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.

2.

3.

**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.