**Design & Technology**

**AQA GCSE** Logo

Description automatically generated with low confidence

**Environment**

**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.** Which one of the following statements is true?

**A** Batteries can be safely thrown away with household rubbish

**B** Rechargeable batteries can only be used ten times

**C** Zinc carbon batteries leak and corrode

**Q2.** Which one of the following statements is true?

**A** Continuous improvement is the concept of storing waste

**B** Global warming is due to decreasing levels of carbon dioxide

**C** Pollution is created by the burning of fossil fuels

**Q3.** Which one of the following has a positive impact on the environment?

**A** Global warming

**B** Pollution

**C** Reducing waste

**Q4.** Which of these is the **most** effective strategy for manufacturers to reduce environmental impact?

**A** Implementing a continuous improvement system for sustainability

**B** Offsetting pollution by planting trees

**C** Using slightly less packaging than before

**Q5.** Analyse and evaluate how global warming concerns are affecting product design and manufacturing processes. Use examples where appropriate **(4 marks)**

**Answers**

**Q1**. C

**Q2**. C

**Q3**. C

**Q4**. A

**Q5.**

Award 1 mark for each valid point up to 4:

* **Material changes** - Shift to biodegradable/recycled materials (e.g., Adidas using ocean plastic in shoes)
* **Energy efficiency** - Renewable energy in factories (e.g., Tesla's solar-powered Gigafactories)
* **Waste reduction** - Circular economy principles (e.g., Philips' lighting-as-a-service model)
* **Transport impacts** - Localized production (e.g., 3D printing spare parts on-demand)