**Design & Technology**

**AQA GCSE** Logo

Description automatically generated with low confidence

**Technical textiles**

**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.** Conductive textiles could be used to?

**A** Burn at high temperatures

**B** Change colour

**C** Illuminate Light Emitting Diodes

**Q2.** Micro encapsulation is used to make fabric?

**A** Anti-bacterial

**B** Conductive

**C** Stronger

**Q3.** Which one of the following is a technical textile?

**A** Brass

**B** Polyester

**C** Kevlar

**Q4.** What is the primary property of Kevlar that makes it useful in bulletproof vests and protective gear?

**A** High electrical conductivity

**B** High tensile strength-to-weight ratio

**C** High flexibility and elasticity

**Q5.** Give two reasons why blended and mixed fibres are used in clothing **(2 marks)**

**Answers**

**Q1**. C

**Q2**. A

**Q3**. C

**Q4**. B

**Q5.**

Typical basic responses:

* to produce different fibres with more desirable/enhanced properties
* improve durability in the fibre
* make fabric easier to care for
* make clothing less likely to shrink or crease.

You may see more detailed responses:

* to produce different fibres with more desirable/enhanced properties, eg polyester can mitigate against shrinkage, creasing and slower drying speed
* make a yarn (blend of two or more fibres) to make a better product
* improve durability in the fibre, eg poly-cotton (polyester and cotton mix)
* produce clothing more cheaply, eg poly-cotton is a cheaper material than pure cotton
* use of cotton with a synthetic material makes it more breathable hence comfortable to wear
* fabrics can be heat-set, eg trousers with a crease, anti-crease fabrics
* similar appearance to natural materials, eg cotton, and can accept a print or dye easily.