

Design & Technology

AQA GCSE

Materials and objects can be manipulated to resist and work with forces and stresses

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. What is the main force being exhibited during a tug of war?

- A** Compression
- B** Tension
- C** Bending

Q2. What is the main force being exhibited when someone sits on a stool?

- A** Compression
- B** Tension
- C** Bending

Q3. What is the main force being exhibited when someone cuts paper with scissors?

- A** Torsion
- B** Tension
- C** Shear

Q4. What is the main force being exhibited when someone crosses a wooden plank bridge

- A** Compression
- B** Torsion
- C** Bending

Q5. Describe what forces are acting on the bow and arrow in the image below before it is fired **(3 marks)**



Answers

Q1. B

Q2. A

Q3. C

Q4. C

Q5.

- Tension
- Compression
- Bending