

Design & Technology

Alloying

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 materials is an alloy?

- A** Copper
- B** Zinc
- C** Brass

Q2. How are particles bonded together in metals?

- A** Covalent bonds
- B** Attractive forces between positive and Negative ions
- C** Attractive forces between atoms and delocalised electrons

Q3. What is an alloy?

- A** A mixture of 2 or more elements, where at least 1 is a metal
- B** A mixture of 3 or more elements, where at least 1 is a metal
- C** A compound of 2 or more elements
Where at least 1 element is a metal

Q4. Which of these statements about alloys is correct?

- A** Most alloys are less useful than the Individual elements that they are made from
- B** Most alloys are harder than the individual Elements that they are made from
- C** Most alloys are softer than the individual Elements that they are made from

Q5. Which of these materials is an alloy?

- A** Steel
- B** Iron
- C** Aluminium

Q6. Carbon steel is made from carbon and which other material?

- A** Copper
- B** Iron
- C** Brass

Q7. Which one of the following is iron alloyed with to make mild steel?

- A** Zinc
- B** Carbon
- C** Aluminium

Q8. Which one of the following not an alloy?

A Solder

B Bronze

C Nickel

Answers

Q1. C

Q2. C

Q3. A

Q4. B

Q5. A

Q6. B

Q7. B

Q8. C