

Design & Technology

Specialist Marking Tools

Materials required for questions

- Pencil
- Rubber
- Calculator

Instructions

- Use black ink or ball-point pen
- Try to 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
- Don't spend too much time on one question

Good luck!

Q1. What is the name of the tool shown in the image below



- A** Try square
- B** Calliper
- C** Mortise gauge

Q2. What is the name of the tool shown in the image below



- A** Odd leg callipers
- B** Dividers
- C** External callipers

Q3. What is the use of the tool shown in the image below



- A Measuring density
- B Measuring thickness
- C Measuring opacity

Q4. Which one of the following is used to test tolerance?

- A Try square
- B Go no-go gauge
- C Jig

Q5. State two ways a jig can improve accuracy during production. **(4 marks)**

Answers

Q1. C

Q2. B

Q3. B

Q4. B

Q5.

- A jig improves accuracy by removing the need for measuring and marking out to take place each time a cut is made or a hole drilled. This removes the potential for human error throughout the marking out process.
- A jig can improve the accuracy of manufacturing a particular joint, by securely holding the workpiece while also guiding the cutting tool, eg when cutting a mitre joint in timber or when drilling a hole.
- A jig can be used to ensure consistency when manufacturing a product, eg guiding a router around a particular profile ensuring consistency and accuracy where two kitchen worksurfaces may join.