05 Measuring & marking out.

WORKSHEET 05 · TOPIC 05 · USE COURSE NOTES PAGES 19–22 TO HELP YOU

NAME | CLASS | DATE

TASK 1 Right tool, right material

6 marks

The wrong tool for the material scores 0. Tick **one** box to show what each tool marks out.

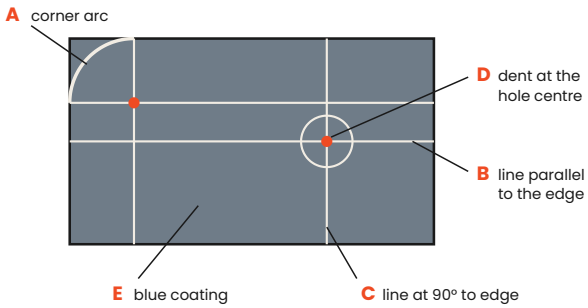
TOOL	WOOD	METAL	TOOL	WOOD	METAL
Try square	☐	☐	**Odd-leg callipers**	☐	☐
Scriber	☐	☐	**Bradawl**	☐	☐
Mortise gauge	☐	☐	**Centre punch**	☐	☐

TASK 2 Name the tool that made each mark

5 marks

This aluminium plate has been marked out. Name the tool that made each feature **A–E**. Three words in the bank are traps.

dividers · compass · odd-leg callipers · engineer's blue · try square · scriber and engineer's square · marking gauge · centre punch



A

B

C

D

E

TASK 3 Fill the gaps

5 marks

Complete each sentence with the correct word or words.

(a) A straight, true edge that every measurement is taken from is called a

(b) On wood, the first surface you plane flat and mark is the

(c) The part of a joint you shade with diagonal lines, ready to remove, is the

(d) To mark acrylic without scratching it, leave the film on or use a

(e) To check the diameter of a part turned on a lathe, use

TASK 4 Put it in order

2 marks

These stages mark out a halving joint on ash. Number them 1–4 in a sensible order.

☐ Gauge the depth from the face side with a marking gauge.

☐ Measure the joint width from the datum end with a rule and pencil.

☐ Shade the waste with diagonal lines.

☐ Square both lines across and down with a try square on the face edge.

TASK 5 Fix the weak answer

4 marks

Each answer below scored **0**. Say why, then rewrite it so it would score full marks.

(a) *"Describe how to mark out the tenon." (2)*
Answer: **"Ruler, pencil, try square, gauge."**

(b) *"Describe how to mark out the R15 corner on the mild steel." (2)*
Answer: **"Use a compass and a try square."**

TASK 6 NOOK planning: the side rail

4 marks

NOOK's side rail is mild steel flat bar, 380 × 25 × 3 mm, with R10 corners and Ø5 holes. Complete the **Tools and equipment** column of this part of the sequence of operations.

STAGE	OPERATION	TOOLS AND EQUIPMENT
1	Coat the ends of the bar so scribed lines show clearly	
2	Scribe the centre lines 10 mm and 12.5 mm from the datum edge	
3	Mark the hole centres and corner centres where the lines cross	
4	Scribe the R10 corner arcs	

TASK 7 Exam practice

4 marks

A pupil is making a pencil pot. The beech base is joined to the sides with **dowel joints**, and a turned aluminium knob is Ø20 mm.

(a) Describe how the dowel hole centres would be marked out on the edge of a side. You must refer to tools. 3

(b) Name the tool used to check the Ø20 mm diameter of the knob during turning. 1

Self-check. A **tool** at every stage? Tools that suit the **material**? My total: ____ / 30