

Measurement investigation with precision

WHAT THIS LESSON TEACHES

A measurement recorded to the nearest millimetre is more precise than one to the nearest centimetre.

- A carpenter reads the skirting board as 2450 mm so the corner joins cleanly.
- On the jug each small mark is 100 ml between 0 and 500 ml.

MODEL THIS ON THE BOARD

READING TO THE NEAREST MILLIMETRE

- ① Look at the big marks for centimetres and the small marks for millimetres.
- ② Count the small marks between two centimetre lines to see what each is worth.
- ③ The edge lands on 14 cm plus 5 small marks so the length is **145 mm**.

ANSWER KEY

- a) 14.5 cm
 b) 95 mm
 c) 12 cm, 125 mm, 130 mm
 Q1: 23.4 cm
 Q2: 300 ml
 Q3: 2.3 kg
 Q4: 852 mm

- a) **Always** — Millimetres are smaller units so they record finer differences.
 b) **Sometimes** — The angle can make the edge appear to land on a different mark.
 c) **Never** — Jug scales vary and marks can be worth 50 ml or 100 ml.
 d) **Always** — Smaller units allow better ordering when lengths are close.

EXTENSION SHEET · STRETCH ANSWERS

- S1: 2.5 cm
 S2: 8.7 cm
 S3: 5.9 cm
 S4: 16 cm

S5: 11 cm

Investigation: How accurately can you measure? — open-ended; scan pupils' working for valid solution paths rather than a single answer.