

Relationship between area units (cm² to m²)

WHAT THIS LESSON TEACHES

A square 1 m on each side has area 1 m². Because 1 m = 100 cm, one square metre holds $100 \times 100 = 10\,000$ little squares each 1 cm².

→ A 1 m × 1 m square drawn on the floor with chalk has area 1 m² = 10 000 cm².

→ A postage stamp covers roughly a few cm².

MODEL THIS ON THE BOARD

CONVERT 3 M² TO CM²

- ① Draw a square 1 m on each side.
- ② Along one edge write 1 m = 100 cm.
- ③ The square is filled with rows of 1 cm squares.
- ④ One row holds 100 little squares.
- ⑤ There are 100 such rows, so total $100 \times 100 = 10\,000$ cm².
- ⑥ Therefore $3\text{ m}^2 = 3 \times 10\,000 = 30\,000$ cm².

ANSWER KEY

Scaffold: visual check on the page

Q1: 30,000 cm²

Q2: 20,000 cm²

Q3: 10,000 cm²

Q4: 4.5 m²

Q5: 7 m²

a) Always — Because 1 m = 100 cm so area multiplies by 100×100 .

b) Never — 5 m² is always 50 000 cm², never sometimes.

c) Always — The conversion factor is fixed at 10 000.

d) Never — 25 000 cm² is always exactly 2.5 m².

EXTENSION SHEET · STRETCH ANSWERS

S1: 12 m²

S2: 0.892 l

S3: 0.981 kg

S4: 3 m²

S5: 3 m²