

Relationship between area units (cm² to m²)

MODULE 5 · MEASURES — LENGTH, AREA, VOLUME, MASS AND CAPACITY

MEASURES

HOW TO ANSWER TODAY

- **Convert units.** To a SMALLER unit → multiply. To a BIGGER unit → divide. Common factors:
cm ↔ mm × 10, m ↔ cm × 100, km ↔ m × 1,000, kg ↔ g × 1,000, l ↔ ml × 1,000.

$$250 \text{ cm} \rightarrow \text{m: } \div 100 = 2.5 \text{ m} \cdot 3.5 \text{ kg} \rightarrow \text{g: } \times 1,000 = 3,500 \text{ g}$$

★ STRETCH PROBLEMS

- 1 Aoife is marking out a homemade Snakes and Ladders board on the classroom floor for wet-day break. One side of the board measures **215 cm**. How many metres is that?
- 2 Aoife measures the long-jump sandpit on athletics sports day and finds it covers **250000** cm². How many m² is the sandpit, if **1** m² = **10,000** cm²?
Convert 250000 cm² to m². (1 m² = 10,000 cm²)
- 3 Fionn measures a new fence post on granny's farm. It is **1391 mm** long. How many metres is that?
- 4 Saoirse's 6th class used autumn leaves to make a mural for the school corridor. The finished mural covered an area of **120000** cm². Convert **120000** cm² to m², given that **1** m² = **10,000** cm².
- 5 Aoife's 6th class are getting the stage in the school hall ready for the school play. The stage floor covers **400000** cm². How many square metres is that, if **1** m² = **10,000** cm²?
Convert 400000 cm² to m². (1 m² = 10,000 cm²)