

Enlargement and scale factor

MODULE 8 · LOCATION, TRANSFORMATIONS AND SCALE SHAPE & SPACE

HOW TO ANSWER TODAY

- **Scale drawing.** Scale 1:N means 1 unit on the drawing = N units in real life. Multiply the drawing length by N.

Scale 1:100, drawing 5 cm $\rightarrow$ real $5 \times 100 = 500 \text{ cm} = 5 \text{ m}$

★ STRETCH PROBLEMS

- 1 For STEM week, Cian is building a model bridge with 6th class. The plan of the real bridge they are copying is drawn to a scale of **1:500** and one span on the drawing measures **3 cm**. What is the real length of that span?
- 2 Saoirse is using a map of the Burren drawn at a scale of **1:50000**. A walking trail on the map measures **7 cm**. What is the real length of the trail?
- 3 Aoife is drawing a plan of the school grounds to turn into a mosaic for the library wall. Her plan is drawn at **1:1000** and a line on the drawing measures **2 cm**. What is the real length?
- 4 6th class are planning a treasure trail around the school grounds for the summer fair. On their scale map drawn at **1:1000**, the trail measures **8 cm**. What is the real length of the trail?
- 5 For STEM week, 6th class are making a scale drawing of the real bridge over the local river. The scale is **1:1000** and one span on the drawing measures **6 cm**. What is the real length of that span?



SHAPE & SPACE