Year 5 Measurement, perimeter and area: topic test

12 questions | 28 marks | 30 minutes

Read measurements, count or split regions, find perimeter and explain which measure a task needs.

Equivalent correct methods earn the corresponding marks.

1. Choose a useful metric unit for the capacity of a drink bottle. [1 mark]

Capacity measures how much it holds.

Answer: Millilitres (mL), or litres for a larger bottle.

2. Convert 4 m to centimetres. [1 mark]

$4 \times 100 = 400$.

Answer: 400 cm

3. A ruler section from 2 cm to 4 cm has 4 equal gaps. Find the length of one gap. [2 marks]

Difference: $4 - 2 = 2$ cm.

$2 \div 4 = 0.5$ cm.

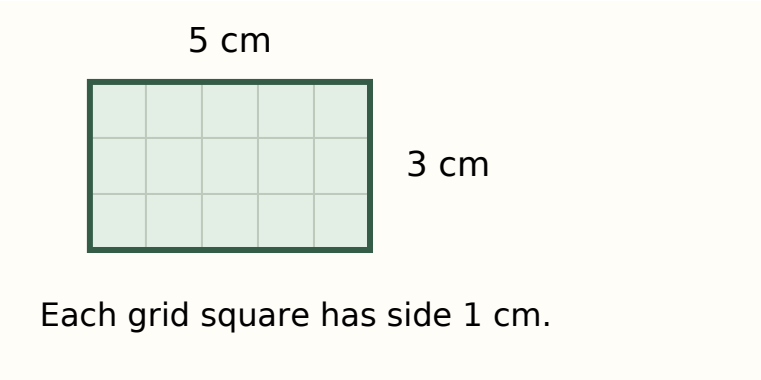
Answer: 0.5 cm

4. An object starts at 3 cm on a ruler and ends at 11 cm. Find its length. [2 marks]

$11 - 3 = 8$ cm.

Answer: 8 cm

5. Find the area of the shown rectangle. [2 marks]



There are 5 squares in each of 3 rows.

$5 \times 3 = 15$ cm^2.

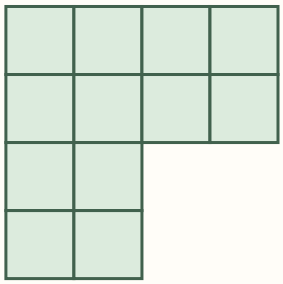
Answer: 15 cm^2

6. Find the perimeter of a 6 cm by 4 cm rectangle. [2 marks]

$6 + 4 + 6 + 4 = 20$ cm.

Answer: 20 cm

7. Find the area of the joined-square region. [2 marks]



Each small square has area 1 cm².

The rows contain 4, 4, 2 and 2 squares.

$4+4+2+2=12$ cm^2.

Answer: 12 cm^2

8. A 7 cm by 4 cm rectangle has a 2 cm by 1 cm corner removed. Find the remaining area. [3 marks]

Full area: $7\times4=28$ cm^2.

Removed: $2\times1=2$ cm^2.

$28-2=26$ cm^2.

Answer: 26 cm^2

9. A 9 m by 4 m rectangular garden has a 2 m gate opening. Find the fencing needed. [3 marks]

Full perimeter: $9+4+9+4=26$ m.

$26-2=24$ m.

Answer: 24 m

10. A rectangle has perimeter 30 cm and width 5 cm. Find its length. [3 marks]

Two widths total 10 cm.

Two lengths: $30 - 10 = 20$ cm.

One length: $20 \div 2 = 10$ cm.

Answer: 10 cm

11. Does a 5 cm by 3 cm rectangle need 15 cm or 16 cm of ribbon to go once around its edge? Explain. [3 marks]

Ribbon follows the perimeter.

$5 + 3 + 5 + 3 = 16$ cm.

15 cm^2 is the area, not the ribbon length.

Answer: 16 cm.

12. Compare a 6 cm by 2 cm rectangle and a square with side 4 cm. Find both perimeters and areas, then state what this shows. [4 marks]

Rectangle: perimeter $6 + 2 + 6 + 2 = 16$ cm; area $6 \times 2 = 12$ cm^2.

Square: perimeter $4 \times 4 = 16$ cm; area $4 \times 4 = 16$ cm^2.

The enclosed areas differ.

Answer: Both perimeters are 16 cm. Areas are 12 cm^2 and 16 cm^2. Equal perimeter does not guarantee equal area.