

Instructions: Work out the shape maths and use the answer bank to check. Read the Did you know? box. Number the 4 steps in order, tick True or False, match each word to its meaning, then write short answers.

1. Shape maths

Answer bank: **20 cm²** **24 cm²** **300 mm²** **49 cm²**

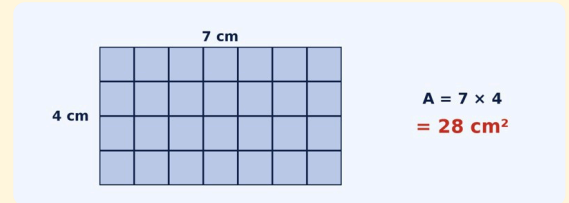
Question	Answer
Rectangle 6 cm by 4 cm	
Square with 7 cm sides	
Triangle: base 8 cm, height 5 cm	
3 cm ² in mm ²	

About this topic

The area is the amount of flat space inside a shape. We measure it by counting square units: square centimetres (cm²), square metres (m²) and so on. A 1 cm² square has sides of 1 cm. A rectangle with length l and width w has area $A = l \times w$, because it is made of w rows of l squares. A square has $A = s \times s$.

Did you know?

- About 16 sheets of A4 paper cover 1 m² of floor.
- Area is always counted in squares, even for round shapes.
- 1 hectare is a square of 100 m by 100 m.



Area by counting squares

2. Put the steps in order

Write 1 to 4 in the boxes (1 = first).

- ☐ Same units: Change all lengths to one unit
- ☐ Square units: Write the answer in cm², m² or similar
- ☐ Name the shape: Decide which formula fits
- ☐ Calculate: Work it out carefully

3. True or false?

Area is measured in square units.	☐ True	☐ False
A 3 cm by 3 cm square has area 6 cm ² .	☐ True	☐ False
A triangle's area is half of base $\times$ height.	☐ True	☐ False
1 cm ² = 10 mm ² .	☐ True	☐ False

4. Match up

Write the letter of the right meaning in the box.

Area	A. The perpendicular distance between a base and the opposite side or vertex.
Square centimetre	B. The amount of flat space inside a shape.
Height	C. The distance from the centre of a regular polygon to the middle of a side.
Apothem	D. A unit of area: a square with 1 cm sides (cm ²).

5. Short answers

- Write the formula for the area of a rectangle.

- What is the area of a parallelogram with base 5 cm and height 3 cm?

- Name a unit for measuring a big field.

- Explain in your own words: Explain the difference between area and perimeter.

- Stretch: Why is the area of a triangle half of base $\times$ height?

