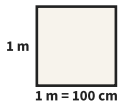


Converting Units of Area and Volume

ANSWERS

1

Convert 3 m^2 to cm^2 .



100 in every direction

$$1 \text{ m}^2 = 100 \times 100$$

$$= 10\,000 \text{ cm}^2$$

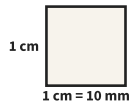
multiply to go to the smaller unit

$$3 \times 10\,000 = 30\,000$$

Answer 30 000 cm²

2

Convert 5 cm^2 to mm^2 .



10 in every direction

$$1 \text{ cm}^2 = 10 \times 10$$

$$= 100 \text{ mm}^2$$

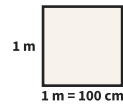
multiply to go to the smaller unit

$$5 \times 100 = 500$$

Answer 500 mm²

3

Convert 2 m^2 to cm^2 .



100 in every direction

$$1 \text{ m}^2 = 100 \times 100$$

$$= 10\,000 \text{ cm}^2$$

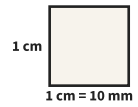
multiply to go to the smaller unit

$$2 \times 10\,000 = 20\,000$$

Answer 20 000 cm²

4

Convert 7 cm^2 to mm^2 .



10 in every direction

$$1 \text{ cm}^2 = 10 \times 10$$

$$= 100 \text{ mm}^2$$

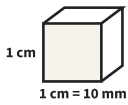
multiply to go to the smaller unit

$$7 \times 100 = 700$$

Answer 700 mm²

5

Convert 4 cm^3 to mm^3 .



10 in every direction

$$1 \text{ cm}^3 = 10 \times 10 \times 10$$

$$= 1\,000 \text{ mm}^3$$

multiply to go to the smaller unit

$$4 \times 1\,000 = 4\,000$$

Answer 4 000 mm³

6

Convert 2 m^3 to cm^3 .

$$1 \text{ m}^3 = 100 \times 100 \times 100$$

$$= 1\,000\,000 \text{ cm}^3$$

$$2 \times 1\,000\,000 = 2\,000\,000$$

Answer 2 000 000 cm³

7

Convert $45\,000 \text{ cm}^2$ to m^2 .

$$1 \text{ m}^2 = 10\,000 \text{ cm}^2$$

Answer 4.5 m²

8

Convert $6\,000 \text{ mm}^3$ to cm^3 .

$$1 \text{ cm}^3 = 1\,000 \text{ mm}^3$$

Answer 6 cm³

Converting Units of Area and Volume *further practice*

ANSWERS

9

Convert $82\,000 \text{ cm}^2$ to m^2 .



$$1 \text{ m}^2 = 10\,000 \text{ cm}^2$$

$$82\,000 \div 10\,000$$

Answer 8.2 m²

10

Which is bigger, 0.4 m^2 or 3500 cm^2 ?
Show how you know.



$$0.4 \text{ m}^2 = 4\,000 \text{ cm}^2$$

Answer 0.4 m²

11

Fill in the boxes.



$$5 \text{ m}^2 = 50\,000 \text{ cm}^2$$

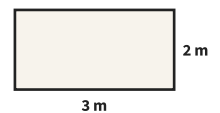
$$= 5\,000\,000 \text{ mm}^2$$

$$\times 10\,000, \text{ then } \times 100$$

Answer 50 000 cm²
5 000 000 mm²

12

A noticeboard is a rectangle 3 m long and 2 m wide. Find its area in cm^2 .



$$3 \times 2 = 6 \text{ m}^2 = 60\,000 \text{ cm}^2$$

Answer 60 000 cm²

13

A mural covers 4 m^2 of a wall.
One tin of paint covers 2500 cm^2 .
How many tins of paint are needed?



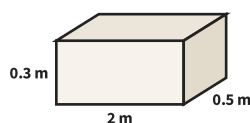
$$4 \text{ m}^2 = 40\,000 \text{ cm}^2$$

$$40\,000 \div 2500$$

Answer 16 tins

14

Find the volume of this storage box in cm^3 .



$$2 \times 0.5 \times 0.3 = 0.3 \text{ m}^3$$

$$0.3 \text{ m}^3 = 300\,000 \text{ cm}^3$$

Answer 300 000 cm³

15

A rug is 1.5 m long and 80 cm wide.
Find its area in m^2 .



$$80 \text{ cm} = 0.8 \text{ m} \quad 1.5 \times 0.8 = 1.2$$

Answer 1.2 m²

16

Ella says $1 \text{ m}^2 = 100 \text{ cm}^2$ because $1 \text{ m} = 100 \text{ cm}$. Is she right? Explain.



$$1 \text{ m}^2 \text{ is } 100 \text{ cm by } 100 \text{ cm}$$

$$100 \times 100 = 10\,000$$

Answer No, $1 \text{ m}^2 = 10\,000 \text{ cm}^2$