Activity 1 Assessment

Unit Conversions

Unit Conversions

Understands the relationship among metric units of length and area



1 m²: \$12.99



100 cm²: \$10.99

I can visualize a square with 1 m side lengths. Since 1 m = 100 cm, there are 100 cm^2 in just one row of a square metre. So, 1 m² has 100 rows of 100 cm^2 .

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

The 1 m^2 flag is much larger.

Uses metric relationships to convert from smaller to larger units to solve problems

 $40\ 000\ cm^2 = ____ m^2$

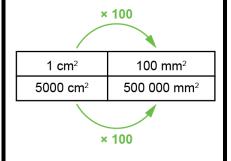
I know 1 $m^2 = 10~000 \text{ cm}^2$. I can use a ratio table to find $40~000 \text{ cm}^2 = 4~\text{m}^2$.

m²	cm²
1	10 000
2	20 000
3	30 000
4	40 000
10	?

Uses metric relationships to convert from larger to smaller units to solve problems

 $5000 \text{ cm}^2 = \underline{\qquad} \text{mm}^2$

I know 1 cm 2 = 100 mm 2 . I can use ratios to find 5000 cm 2 = 500 000 mm 2 .



Uses metric relationships to solve problems

A table top has an area of 2 m². Would 700 square tiles with 5 cm sides be enough to cover the table top?

I converted the area of table: $2 \text{ m}^2 = 20 000 \text{ cm}^2$.

Then, I calculated the area of the tiles:

 $5 \times 5 \times 700 = 17500 \text{ cm}^2$ Since 17500 cm² < 20000 cm², there are not enough tiles to cover the table top.