



Volume of Rectangular Prisms

Name: _____

Date: _____

Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence: The volume of a box 4 cm long, 3 cm wide, and 2 cm tall is 24 cm².

Rewrite: _____

2. Fix the sentence: To find the volume of a rectangular prism, multiply length times width.

Rewrite: _____

3. Fix the sentence: A prism 5 in long, 2 in wide, and 3 in tall has a volume of 13 in³.

Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

- Volume measures the amount of _____ inside a three-dimensional shape.
- A rectangular prism with length 6 cm, width 4 cm, and height 2 cm has a volume of _____ cm³.
- A unit cube has a volume of _____ cubic unit.
- A box that is 3 m long, 3 m wide, and 3 m tall has a volume of _____ m³.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. A rectangular prism has 5 layers of unit cubes with 12 cubes per layer. What is the total volume?

2. Why do we measure volume in cubic units instead of square units?

Answer Key · Volume of Rectangular Prisms · Grade: Grade 5

Part A: Fix the Sentence

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1. Fix the sentence: The volume of a box 4 cm long, 3 cm wide, and 2 cm tall is 24 cm².

Rewrite: The volume of a box 4 cm long, 3 cm wide, and 2 cm tall is 24 cm³.

2. Fix the sentence: To find the volume of a rectangular prism, multiply length times width.

Rewrite: To find the volume of a rectangular prism, multiply length times width times height.

3. Fix the sentence: A prism 5 in long, 2 in wide, and 3 in tall has a volume of 13 in³.

Rewrite: A prism 5 in long, 2 in wide, and 3 in tall has a volume of 30 in³.

Part B: Fill in the Blank

Write the missing word or number on each line.

- Volume measures the amount of space inside a three-dimensional shape.
- A rectangular prism with length 6 cm, width 4 cm, and height 2 cm has a volume of 48 cm³.
- A unit cube has a volume of 1 cubic unit.
- A box that is 3 m long, 3 m wide, and 3 m tall has a volume of 27 m³.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. A rectangular prism has 5 layers of unit cubes with 12 cubes per layer. What is the total volume?

The total volume is 60 cubic units because $12 \times 5 = 60$.

2. Why do we measure volume in cubic units instead of square units?

Volume measures three-dimensional space, so cubic units account for length, width, and height.
