



Volume of Rectangular Prisms

Name: _____

Date: _____

Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

1. The formula for the volume of a rectangular prism is $V = l \times w \times$ _____ .
2. A small cube with side length 1 unit used to measure volume is called a _____ .
3. Volume is measured in _____ units such as cm^3 or in^3 .
4. A rectangular prism has three _____ : length, width, and height.
5. A _____ is a 3D shape with six rectangular faces.
6. A prism $10 \text{ cm} \times 5 \text{ cm} \times 2 \text{ cm}$ has a volume of _____ cm^3 .
7. The volume of a cube with side length 4 m is _____ m^3 .
8. If each layer has 8 unit cubes and there are 6 layers, the volume is _____ cubic units.
9. Doubling the height of a rectangular prism _____ its volume.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

$3 \text{ cm} \times 4 \text{ cm} \times 5 \text{ cm}$	→ _____	100 cm^3
$6 \text{ cm} \times 2 \text{ cm} \times 7 \text{ cm}$	→ _____	84 cm^3
$8 \text{ cm} \times 3 \text{ cm} \times 3 \text{ cm}$	→ _____	60 cm^3
$5 \text{ cm} \times 5 \text{ cm} \times 4 \text{ cm}$	→ _____	72 cm^3

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

Part A: Fill in the Blank

Write the missing word or number on each line.

1. The formula for the volume of a rectangular prism is $V = l \times w \times \underline{h}$.
2. A small cube with side length 1 unit used to measure volume is called a unit cube .
3. Volume is measured in cubic units such as cm^3 or in^3 .
4. A rectangular prism has three dimensions : length, width, and height.
5. A rectangular prism is a 3D shape with six rectangular faces.
6. A prism $10 \text{ cm} \times 5 \text{ cm} \times 2 \text{ cm}$ has a volume of 100 cm^3 .
7. The volume of a cube with side length 4 m is 64 m^3 .
8. If each layer has 8 unit cubes and there are 6 layers, the volume is 48 cubic units.
9. Doubling the height of a rectangular prism doubles its volume.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

$3 \text{ cm} \times 4 \text{ cm} \times 5 \text{ cm}$	→ <u>60 cm^3</u>	100 cm^3
$6 \text{ cm} \times 2 \text{ cm} \times 7 \text{ cm}$	→ <u>84 cm^3</u>	84 cm^3
$8 \text{ cm} \times 3 \text{ cm} \times 3 \text{ cm}$	→ <u>72 cm^3</u>	60 cm^3
$5 \text{ cm} \times 5 \text{ cm} \times 4 \text{ cm}$	→ <u>100 cm^3</u>	72 cm^3