

# 5th Grade Volume Word Problems - Answer Key

5th Grade - volume of rectangular prisms in context | 20 minutes

---

**Read each problem. Use  $V = \text{length} \times \text{width} \times \text{height}$ . Write the equation and the answer in cubic units.**

Example: A box is 5 cm by 3 cm by 2 cm:  $V = 5 \times 3 \times 2 = 30$  cubic cm.

1. A box is 4 cm long, 3 cm wide, and 5 cm tall. What is its volume?

**Answer:  $4 \times 3 \times 5 = 60$  cubic cm**

2. A fish tank is 10 in by 6 in by 8 in. What is its volume?

**Answer:  $10 \times 6 \times 8 = 480$  cubic in**

3. A crate is 2 ft by 2 ft by 3 ft. How much can it hold?

**Answer:  $2 \times 2 \times 3 = 12$  cubic ft**

4. A drawer is 12 cm by 5 cm by 4 cm. Find its volume.

**Answer:  $12 \times 5 \times 4 = 240$  cubic cm**

5. A storage box is 7 in long, 4 in wide, and 9 in tall. What is its volume?

**Answer:  $7 \times 4 \times 9 = 252$  cubic in**

6. A cube has edges of 5 cm. What is its volume?

**Answer:  $5 \times 5 \times 5 = 125$  cubic cm**

## Challenge

7. Two boxes each measure 3 x 3 x 2 cm. What is their total volume?

**Answer: Each =  $3 \times 3 \times 2 = 18$ ; total =  $18 + 18 = 36$  cubic cm**

8. Why is volume measured in cubic units?

**Answer: Because it counts how many unit cubes fill the space - three dimensions multiplied together.**