



Volume of Rectangular Prisms

Name: _____

Date: _____

Grade: Grade 5

Part A: Multiple Choice

Circle the best answer for each question.

1. A shipping box is $12 \text{ in} \times 8 \text{ in} \times 6 \text{ in}$. How many 2-inch cubes fit inside?

- A) 72
- B) 48
- C) 36
- D) 288

2. A pool is $10 \text{ m} \times 4 \text{ m} \times 2 \text{ m}$. How many cubic meters of water does it hold?

- A) 60 m^3
- B) 80 m^3
- C) 40 m^3
- D) 16 m^3

3. A cereal box is $30 \times 8 \times 20 \text{ cm}$. A bowl holds 600 cm^3 . How many full bowls can be filled?

- A) 6
- B) 8
- C) 10
- D) 4

4. A sandbox is $6 \text{ ft} \times 4 \text{ ft} \times 1 \text{ ft}$. Sand costs \$3 per cubic foot. Total cost to fill?

- A) \$24
- B) \$72
- C) \$48
- D) \$36

Part B: Fill in the Blank

Write the correct answer on each line.

1. A toy chest is $3 \text{ ft} \times 2 \text{ ft} \times 2 \text{ ft}$. It can hold _____ cubic feet of items.

2. A planter box is $40 \text{ cm} \times 20 \text{ cm} \times 15 \text{ cm}$. It needs _____ cm^3 of soil to fill.

3. A crate holds 180 in^3 . Each block is $3 \times 2 \times 1 \text{ in}$. The crate fits _____ blocks.

4. A fish tank is $24 \text{ in} \times 12 \text{ in} \times 10 \text{ in}$. Its volume is _____ in^3 .

5. A moving box is $2 \text{ ft} \times 2 \text{ ft} \times 3 \text{ ft}$. Three such boxes hold _____ ft^3 total.

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

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Circle the best answer for each question.

1. A shipping box is $12 \text{ in} \times 8 \text{ in} \times 6 \text{ in}$. How many 2-inch cubes fit inside?

- A) 72
- B) 48
- C) 36
- D) 288

2. A pool is $10 \text{ m} \times 4 \text{ m} \times 2 \text{ m}$. How many cubic meters of water does it hold?

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- B) \$72
- C) \$48
- D) \$36

Part B: Fill in the Blank

Write the correct answer on each line.

1. A toy chest is $3 \text{ ft} \times 2 \text{ ft} \times 2 \text{ ft}$. It can hold 12 cubic feet of items.
2. A planter box is $40 \text{ cm} \times 20 \text{ cm} \times 15 \text{ cm}$. It needs 12,000 cm^3 of soil to fill.
3. A crate holds 180 in^3 . Each block is $3 \times 2 \times 1 \text{ in}$. The crate fits 30 blocks.
4. A fish tank is $24 \text{ in} \times 12 \text{ in} \times 10 \text{ in}$. Its volume is 2,880 in^3 .
5. A moving box is $2 \text{ ft} \times 2 \text{ ft} \times 3 \text{ ft}$. Three such boxes hold 36 ft^3 total.