

Name _____

Date _____

Understand Volume With Unit Cubes

G5

Understanding volume with unit cubes helps measure how much space an object occupies. By counting cubes, students learn to calculate volume, building a foundation for geometry and real-world problem-solving in measuring three-dimensional objects.

Q1 How many unit cubes are needed to fill a rectangular prism with dimensions 3 units by 2 units by 4 units?

- A. 24
- C. 32

- B. 28
- D. 30

Q2 A cube has a side length of 5 units. What is the volume of the cube?

- A. 125 cubic units
- C. 150 cubic units

- B. 100 cubic units
- D. 75 cubic units

Q3 A rectangular prism is built with 48 unit cubes. If its base area is 12 square units, how many layers of cubes are in the prism?

- A. 4 layers
- C. 13 layers

- B. 6 layers
- D. 5 layers

Q4 A rectangular prism has dimensions 4 units by 3 units by 6 units. What is the volume of the prism?

- A. 72 cubic units
- C. 70 cubic units

- B. 74 cubic units
- D. 68 cubic units

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Understand Volume With Unit Cubes - Answer Key**Q1****A****Q2****A****Q3****A****Q4****A**