MATH · GRADE 5

Volume and Capacity

How much fits inside

Two related ideas

1 **Volume**

The space a 3D object takes up. Measured in cubic units — cm³, m³.

Example: Volume of a cuboid = length × width × height.

2 **Capacity**

How much LIQUID a container can hold. Measured in mL or L.

Example: 1,000 mL = 1 L. 1 cm³ holds exactly 1 mL of water.

Section A — Volume of cuboids

1. A cuboid is 5 cm × 3 cm × 4 cm. What is its volume?
2. A box is 10 cm × 8 cm × 6 cm. Volume?
3. A storage trunk is 1 m × 0.5 m × 0.4 m. Volume in m³? In cm³?
4. A 12 cm cube. Volume?
5. Two cuboids: A is 6 × 4 × 5; B is 3 × 8 × 5. Which has the bigger volume?

Section B — Capacity word problems

1. A 2-liter bottle of juice — how many 250 mL glasses can it fill?
2. A bath holds 80 L. A jug holds 1.5 L. How many full jugs to fill the bath?
3. A small tank measures 30 cm × 20 cm × 25 cm. What is its capacity in mL? In L?