Answers and talk notes

Determine the Volume of Rectangular Prisms

What your student is learning

Tonight we find the volume of a box. Volume is how much space fits inside. We multiply the three edges: length, width, and height.

Answers

Ask your student to explain before you look.

1. **B.** How much space is inside a solid. How much space is inside a solid is what volume measures.
2. **C.** 24 cubic units. 24 cubic units: 4 × 3 × 2 = 24.
3. **A.** cm^3. cm^3 are cubic centimeters, the unit for volume.
4. **B.** 60 cubic feet. 60 cubic feet: 20 × 3 = 60.
5. **D.** 100 in^3. 100 in^3: 10 × 2 × 5 = 100.

Talk about it

Why is the volume written in cubic units instead of square units?

Home mission

Find a small box, like a tissue box. Pretend its edges are 3, 3 and 2 units. Can your student say how many unit cubes fill it? Why is the answer in cubic units?

When they are stuck, ask

- What are the three numbers — the length, the width, and the height?
- Let's multiply two of them first, then multiply by the third.
- What units should the answer have? Why cubic?

Try not to say

- Just add the three edges together.
- You only need the length and the width.
- Volume uses square units.