

Volume of Rectangular Prisms

Fill in each part when its number appears on the slide.

Name: _____

Date: _____

PART 1 · TARGET

I can find the volume of rectangular prisms and composite figures and explain what volume means.

PART 2 · WARM-UP

1. What is the area of a rectangle 5 cm long and 3 cm wide?

2. What is the difference between area and volume?

3. About how many sugar cubes could fit in a small box? How could you find out?

PART 3 · PREDICTION

How could you find how many sugar cubes fill a box without filling it?

Circle one: ☐ Count one layer, then multiply ☐ Guess ☐ Measure the outside only

PART 4 · VOCABULARY

Word	Meaning
Volume	
Cubic unit	
Rectangular prism	
Base (B)	

PART 5 · VOLUME FILLS SPACE

Volume counts _____ that fill a space. It is measured in _____ units.

Check: How many cubes are in the prism?

Answer: _____ cm^3

PART 6 · LAYERS: $V = L \times W \times H$

Volume = _____ $\times$ _____ $\times$ _____.

Check: A box is 5 cm $\times$ 2 cm $\times$ 3 cm. Volume?

Answer: _____ cm^3

PART 7 • $V = B \times H$

$V =$ _____ $\times h$, where B is the area of the _____.

Check: Base area = 12 cm^2 , height = 5 cm . Volume?

Answer: _____ cm^3

PART 8 • COMPOSITE FIGURES

For a _____ figure, split it into prisms and _____ the volumes.

Check: Prism A is $4 \times 2 \times 2$. Prism B is $2 \times 2 \times 4$. Total volume?

Answer: _____ cm^3

PART 9 • WORKED EXAMPLE

Final answer from the example: _____

PART 10 • WE DO

A fish tank is 5 dm long, 3 dm wide, and 4 dm tall. How many liters does it hold? ($1 \text{ dm}^3 = 1 \text{ liter}$)

Answer: _____

PART 11 • YOU DO

A box has a base of 20 cm^2 and a height of 6 cm . What is its volume?

Answer: _____ cm^3

PART 12 • WORK TIME: THE AQUARIUM BUILDER QUEST

Write each code piece as you earn it: Level 1: _____ Level 2: _____ Level 3: _____ Level 4: _____ Level 5:

Final code: _____

PART 13 • WRAP-UP

Was your prediction in Part 3 right? One thing I learned today:
