LESSON WORKSHEET · GRADE 5 · 5.M.4-5.M.5

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 × W × H

Volume = _____ × _____ × _____.

Check: A box is 5 cm × 2 cm × 3 cm. Volume?

Answer: _____ cm^3

PART 7 · V = B × H

V = _____ × h, where B is the area of the _____.

Check: Base area = 12 cm², height = 5 cm. Volume?

Answer: _____ cm³

PART 8 · COMPOSITE FIGURES

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

Check: Prism A is 4 × 2 × 2. Prism B is 2 × 2 × 4. Total volume?

Answer: _____ cm³

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 dm³ = 1 liter)

Answer: _____

PART 11 · YOU DO

A box has a base of 20 cm² and a height of 6 cm. What is its volume?

Answer: _____ cm³

PART 12 · WORK TIME: THE SHIPPING CONTAINER ESCAPE

Write each code piece as you earn it: Lock 1: ____ Lock 2: ____ Lock 3: ____ Lock 4: ____ Lock 5: ____

Final code: _____

PART 13 · WRAP-UP

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

_____

_____