Assess and Respond

Support, strengthen, and stretch learning by assigning these digital resources that adjust to each student's current level of skill and understanding: • **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Quiz: Sub-Unit 2

Independent | 20 min

Facilitation: Assign this Sub-Unit Quiz at the end of Sub-Unit 2 to evaluate students' proficiency with the key concepts and skills addressed in this sub-unit. The Up Next problem previews targeted concepts and skills addressed in the next sub-unit.

TEKS
(S) = Supporting standard
(R) = Readiness standard

Item Analysis

Problem(s)	Concept or skill	DOK	TEKS
1, 3	Representing problems related to the volume of rectangular prisms with multiple expressions, e.g., $\ell \times w \times h$ and $B \times h$	2	5.4.G, 5.4.H *(S)* 5.1.D
2	Solving problems related to the volume of rectangular prisms	2	5.4.H *(S)* 5.1.G
4	Solving problems related to the volume of rectangular prisms by reasoning about the number of layers multiplied by the area of the base	2	5.4.H *(S)*, 5.6.B *(S)* 5.1.A
Up Next . . . (preparation for Lesson 8)			
5*	Solving problems related to the area of rectangles where dimensions are whole numbers	2	4.5.D *(R)*

*Because this problem addresses prerequisite concepts for the next sub-unit, the Up Next problem is not intended to be part of a student's overall score on this assessment.

Assessment Resources

- Student Print Assessments
- Answer Keys and Rubrics

Differentiation Resources

Intervention and Extension Resources includes:
- Mini-Lessons
- Extensions

Centers Resources includes:
- Centers

Practice

During Sub-Unit 3, if students need further review or practice with concepts or skills, consider the following resources:

- Lesson Practice (Print and Digital)
- Item Bank (Digital)

PDF *Assessment Resource PDF*

Digital

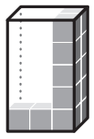
Unit 1
Quiz: Sub-Unit 2

Name _____ Date _____

Quiz: Sub-Unit 2

Unit 5.1

1 Write 2 different expressions that represent the volume of the rectangular prism. Then determine the volume.
Sample expressions shown.



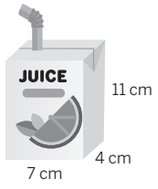
expression 1: 6 × 5

expression 2: 3 × 2 × 5

volume: 30 unit cubes

2 This juice box is in the shape of a rectangular prism. What is the volume of the juice box in cubic centimeters?

Show or explain your thinking.
Sample work shown.



I can use the formula
$V = \ell \times w \times h$
$V = 7 \times 4 \times 11$
$= 28 \times 11$
$= 308$

answer: 308 cubic centimeters

3 A box is shaped like a rectangular prism. Its measurements are 6 centimeters by 2 centimeters by 15 centimeters. Select **TWO** expressions that represent the volume of the box in cubic centimeters.

(A.) $6 \times 2 \times 15$ B. $6 \times 2 + 15$ C. 12×30
D. 2×75 (E.) 15×12

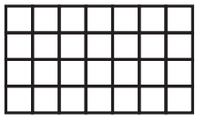
5

Name _____ Date _____

Quiz: Sub-Unit 2 (continued)

4 The model represents the bottom layer of a crate in the shape of a rectangular prism. Each square represents 1 square inch. The crate has 9 layers. What is the total volume of the crate in cubic inches?

Show or explain your thinking.
Sample work shown.

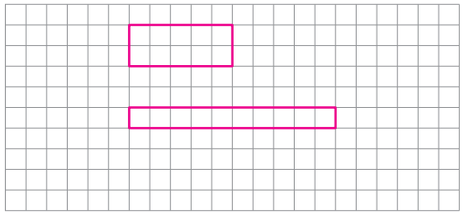


bottom layer: 7 × 4 = 28 square inches
9 layers: 28 × 9 = 252 cubic inches

answer: 252 cubic inches

Up Next . . . Sample response shown.

5 Draw **ALL** the possible rectangles with an area of 10 square units.



6

D Differentiation (Quiz: Sub-Unit 2)

To **Strengthen** and **Stretch** students' learning, refer to the differentiation resources suggested throughout this Sub-Unit.

Sub-Unit Goal(s)	Problem(s)	Respond to Student Thinking

Sub-Unit 2: Develop and use formulas to determine the volume of a rectangular prism, including $V = \ell \times w \times h$, $V = Bh$, and $V = s \times s \times s$.	1, 3	**Support**
		• **Mini-Lessons:**
		  • *Using Volume Formulas* (ML 1.07)
		  • *Writing Volume Expressions* (ML 1.05B)
		• **Teacher Move:** Consider reviewing Lesson 6, Activities 1 and 2.

	2	**Support** • **Mini-Lesson:** *Using the Structure of Rectangular Prisms to Determine Volume* (ML 1.04) • **Teacher Move:** Consider inviting students to review the problem by asking, "Which volume formula(s) can you use to determine the volume of this prism?"
	4	**Support** • **Teacher Move:** Consider inviting students to review the problem by drawing a diagram that represents the crate with its labeled measurements and then using an appropriate volume formula to determine the volume.
Up Next . . . (preparation for Lesson 8)		
Sub-Unit 3: Determine whether a number is prime or composite. Simplify expressions with up to 2 levels of grouping, using the order of operations.	5	**Support** • **Mini-Lesson:** *Identifying Prime and Composite Numbers* (ML 1.09) • **Teacher Move:** Students will have more opportunities to determine all possible rectangles by reasoning about factor pairs in Lesson 8.

Notes: