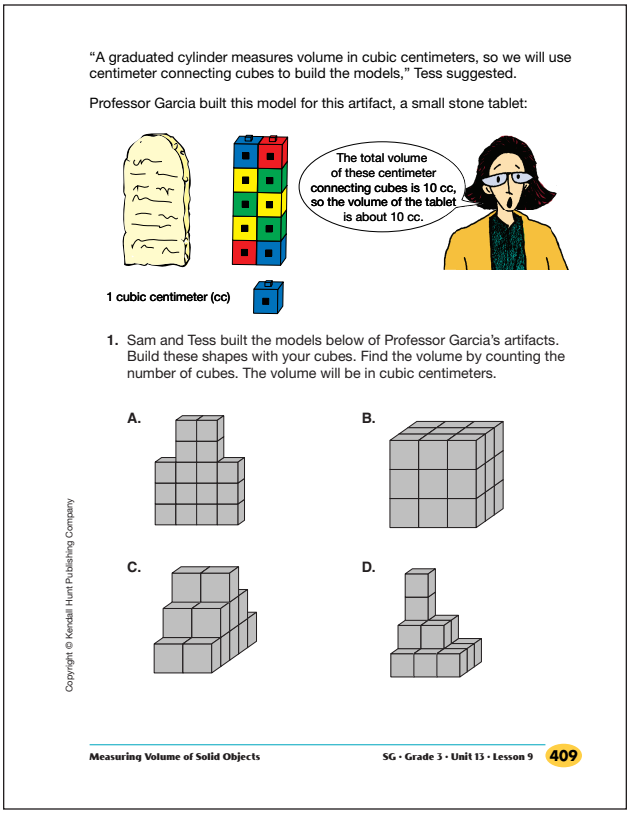
Student Guide

Measuring Volume of Solid Objects (SG p. 409)
Question 1

1. **A.** 16 cc **B.*** 27 cc
   C. 18 cc **D.** 15 cc

Homework (SG pp. 411–412)
Questions 1–4

1. **A.** 21 cc
   B. 24 cc
   C. 48 cc
   D. 28 cc
2. Explanations will vary. Possible response:
   1 layer is 4 cubes by 3 cubes. That is 12 cubes.
   There are 2 layers.
   12 cubes + 12 cubes = 24 cc.
3. 16 cc. The water level started at 50 cc and rose to 66 cc, so the volume of the clay is 16 cc.
   66 cc − 50 cc = 16 cc.
4. Josh is not correct. He read the volume of the water and the model. The volume of the model is 8 cc.


"A graduated cylinder measures volume in cubic centimeters, so we will use centimeter connecting cubes to build the models," Tess suggested.

Professor Garcia built this model for this artifact, a small stone tablet:

1. Sam and Tess built the models below of Professor Garcia's artifacts. Build these shapes with your cubes. Find the volume by counting the number of cubes. The volume will be in cubic centimeters.

A. B. C. D.

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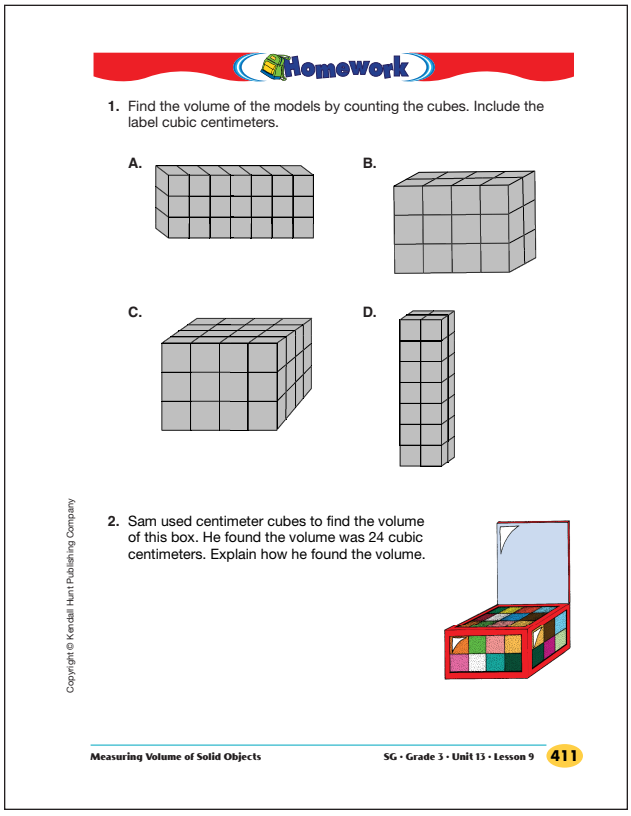
Homework

1. Find the volume of the models by counting the cubes. Include the label cubic centimeters.

A. B. C. D.

2. Sam used centimeter cubes to find the volume of this box. He found the volume was 24 cubic centimeters. Explain how he found the volume.

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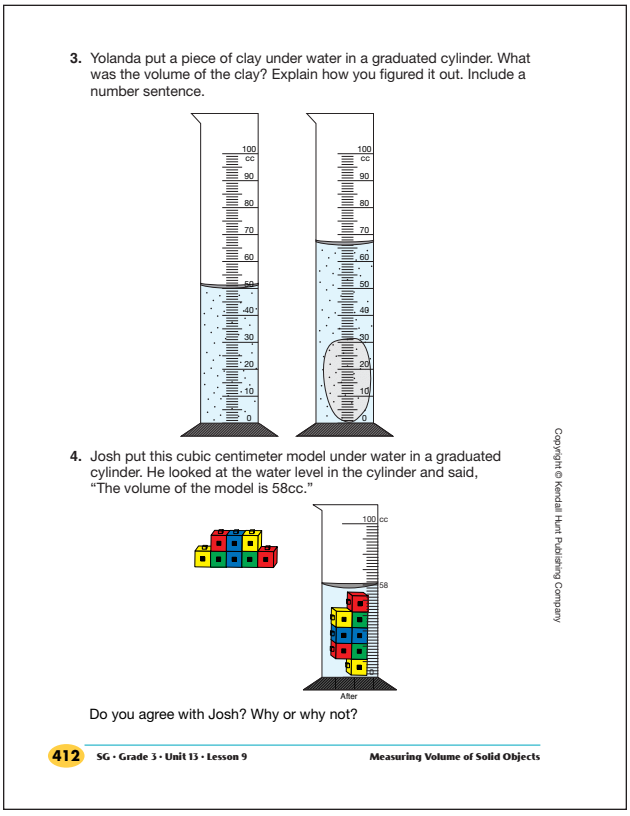
3. Yolanda put a piece of clay under water in a graduated cylinder. What was the volume of the clay? Explain how you figured it out. Include a number sentence.

4. Josh put this cubic centimeter model under water in a graduated cylinder. He looked at the water level in the cylinder and said, "The volume of the model is 58cc."

Do you agree with Josh? Why or why not?

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***Answers and/or discussion are included in the lesson.**