

Activity 2: Volume of Solids

Name _____

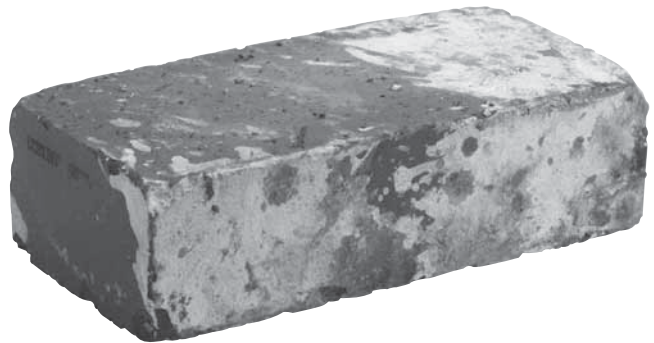
Date _____

Class _____

Key Question

We Think

1. What method could you use to determine the volume of the solid block pictured at the right?



Explore Your Ideas

Experiment 1: How is using an equation to calculate the volume of a rectangular solid the same as counting the number of standard-unit cubes that fit inside the solid?

Table 1: Counting and Calculating

Counting 1-cm cubes	Cubes in One Layer		Number of Layers	Volume (cm ³)
Using an Equation	Width (cm)	Length (cm)	Height (cm)	Volume (cm ³)
	_____ cm ³	_____ cm ³	_____ cm ³	_____ cm ³

Experiment 2: Using an Equation to Calculate the Volume of a Solid

Table 2: Measured Volumes of Solids				
Solid Cube	Width (cm)	Length (cm)	Height (cm)	Volume (cm ³)
Team Member 1	_____ cm	_____ cm	_____ cm	_____ cm ³
Team Member 2	_____ cm	_____ cm	_____ cm	_____ cm ³
Team Member 3	_____ cm	_____ cm	_____ cm	_____ cm ³
Team Member 4	_____ cm	_____ cm	_____ cm	_____ cm ³
Volume Best Value:				_____ cm ³
Uncertainty:				_____ cm ³
Rectangular Solid	Width (cm)	Length (cm)	Height (cm)	Volume (cm ³)
Team Member 1	_____ cm	_____ cm	_____ cm	_____ cm ³
Team Member 2	_____ cm	_____ cm	_____ cm	_____ cm ³
Team Member 3	_____ cm	_____ cm	_____ cm	_____ cm ³
Team Member 4	_____ cm	_____ cm	_____ cm	_____ cm ³
Volume Best Value:				_____ cm ³
Uncertainty:				_____ cm ³

Our Consensus Ideas

The key question for this activity is:



How are the volumes of cubes and rectangular solids measured?

Record the class consensus ideas.
