

Activity 3: Volume of Liquids

Name _____

Date _____

Class _____

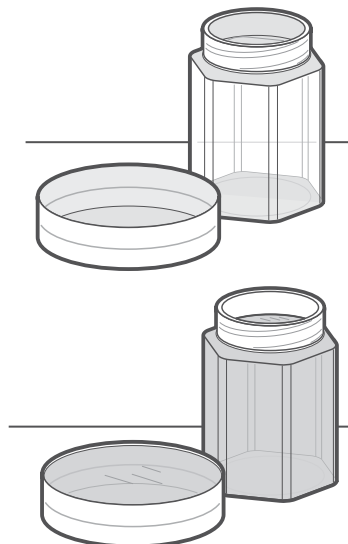
Key Question

Purpose

1. What problem will you have when trying to use the same method of fitting standard-unit cubes that you used for the rectangular container?

We Think

Look at the two containers in the diagram.



1. Imagine that the containers on the previous page were filled with water. How do you think the volumes of water in the two containers compare? Do you think one container has a larger volume than the other? Write your reasons.

2. How could you measure the volume of water in each container?

Explore Your Ideas

Experiment 1: Volume and Height of Water in Graduated Cylinders

1. How is it that the small graduated cylinder holds the same volume of water as the larger cylinder does, even though the water level in the small cylinder is much higher than it was in the large cylinder?

Experiment 2: What is the volume of liquid in two containers?

Table: Measured Volumes of Containers		
	Volume of Hexagonal Jar (mL)	Volume of Flat Metal Tin (mL)
Team Member 1		
Team Member 2		
Team Member 3		
Team Member 4		
Team Average		
Uncertainty		

2. How close or far apart are the measured volumes of the two containers? Compare this result to what you expected.

Make Sense of Your Ideas

1. How would you decide whether to use the calculation method or the liquid-pouring method to measure volume?

2. What could lead to errors in volume measurements made using the formula method?
The liquid-pouring method?

Formula Method: _____

Liquid-Pouring Method: _____

Our Consensus Ideas

The key question for this activity is:



How is the volume of liquids measured?

1. Write your answer to the key question.

2. Record the class consensus ideas.
