

Lesson 7: Introduction to Liquid Volume

Standards Alignments

Addressing 3.MD.A.2

Teacher-facing Learning Goals

- Estimate and compare liquid volumes of containers using informal units and liters.
- Understand liquid volume as the amount of space that a liquid takes up.

Student-facing Learning Goals

Let's learn about liquid volume.

Lesson Purpose

The purpose of this lesson is to introduce students to the measurement of **liquid volume**.

In previous lessons, students measured and estimated the weight of objects in grams and kilograms. In this lesson, students learn that **liquid volume** is the amount of space that a liquid takes up and consider the challenges of directly comparing liquid volumes by just looking at them. Students use informal units (such as plastic cups, spoons, and so on) to compare the liquid volume that two containers will hold. Finally, students are introduced to the **liter** as a metric unit of liquid volume. They create a tool for measuring liquid volume in liters by filling a container and making a mark for each liter as it's added to the container. A clear container is used so students can see the level of the liquid and a dry erase marker is used so the marks can be erased after the lesson.

To build a conceptual understanding of liquid volume, it is extremely helpful for students to have firsthand experience of comparing liquids in different containers. To make that possible, some new materials and preparation are required for this lesson.

Access for:

Students with Disabilities

• Engagement (Activity 2)

English Learners

• MLR5 (Activity 2)

Instructional Routines

Notice and Wonder (Warm-up)



Materials to Gather

• Markers (dry-erase): Activity 2

Lesson Timeline

Warm-up	10 min
Activity 1	20 min
Activity 2	15 min
Lesson Synthesis	10 min
Cool-down	5 min

Teacher Reflection Question

What surprised you about student thinking about measurements of liquid volume in the first activity? What strategies did you anticipate? Which did you not anticipate?

Cool-down (to be completed at the end of the lesson)

⑤ 5 min

Liquid Volume Reflection

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Student-facing Task Statement

What did you learn about liquid volume and how to measure it?

Student Responses

Sample response: Liquid volume is the amount of space that a liquid takes up. It can be hard to compare the liquid volume that containers hold if we don't use the same unit. Liters are units of liquid volume.