



HEADS IN, HEARTS IN

Measuring Liquids

Instructions for Set-Up



Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- “Liquid Measurement Task Cards” handout
- 3–5 liquid measuring tools
- Three to five 16-ounce plastic bottles
- Liquid food coloring
- Water
- Permanent marker
- Scissors
- Display table

Activity Preparation

- ▶ Purchase or locate items on supply list.
- ▶ Print one copy of the “Guide for Families” handout. Laminate or place in a clear plastic standup display to allow participants to see it more readily.
- ▶ Fill each of the three to five 16-ounce bottles with water of differing amounts (for example, $\frac{1}{2}$ cup, 1 tablespoon and so on).
- ▶ Using the liquid food coloring, color water in each bottle a different color.
- ▶ Using a permanent marker, write the correct amount of liquid on the bottom of the plastic bottle (for example, $\frac{1}{2}$ cup, 1 tablespoon and so on).
- ▶ Print “Liquid Measurement Task Cards” handout on durable paper and cut out the cards, or print, cut and laminate the cards.
- ▶ Set up the display table and arrange needed supplies.

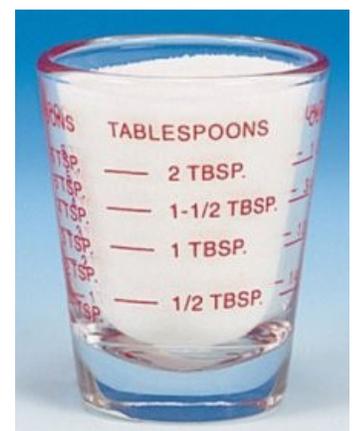
Note: This activity is best done in conjunction with the “Measuring Dry Materials” activity.

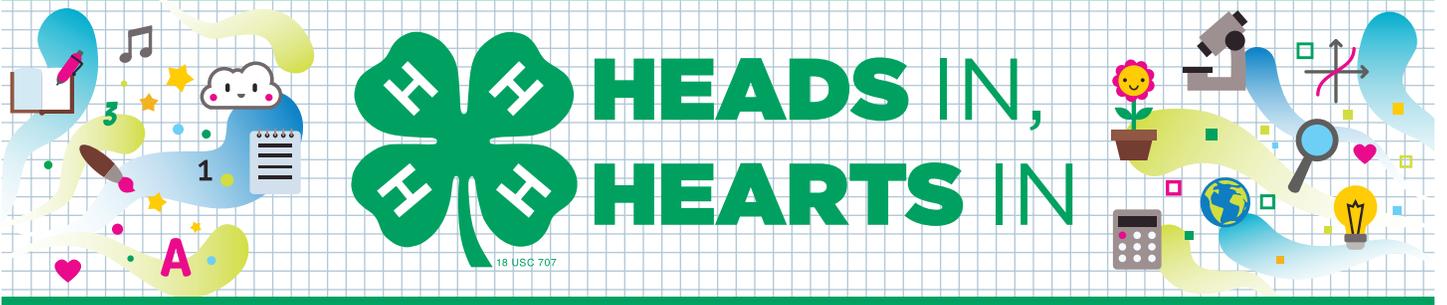
Liquid measuring utensil

This can be used to measure teaspoons, tablespoon and ounces.

Liquid measuring cup

This cup can be used for measuring $\frac{1}{2}$ cup to 2 cup measurements.





Measuring Liquids

Guide for Families

Learning Objectives

What you need to know:

When measuring liquid substances, it is important to use measuring tools that have been created specifically for liquids. For instance, a liquid measuring cup is **transparent** (you can see through it) so the **meniscus** can easily be seen. When you look at liquid in a clear container, it appears to have a curved surface. That's the meniscus. When you're looking for the meniscus, be sure to look at the liquid from the side of the container, not the top. The meniscus occurs because the attractive force between the liquid and the container is greater than between the liquid molecules making the liquid cling to the sides of the container. When measuring liquids, use the bottom of the meniscus for the most accurate measurement.

What you will do and learn:

You will be able to identify that liquid and solid measuring tools are different. When measuring each liquid, look for the meniscus. You will practice using liquid measuring cups to measure the water inside each bottle.

Instructions

1. Choose a measurement task card and read the directions.
2. Complete the tasks of each card.
3. Repeat the activity several times by choosing different task cards.

Measuring Liquids

Liquid Measurement Task Cards Handout

Find the bottle with yellow liquid.

Which measuring tool will you use?

Measure that liquid and see how much there is.

Look on the bottom of the plastic bottle. Were you correct?

Find the bottle with red liquid.

Which measuring tool will you use?

Measure that liquid and see how much there is.

Look on the bottom of the plastic bottle. Were you correct?

Find the bottle with green liquid.

Which measuring tool will you use?

Measure that liquid and see how much there is.

Look on the bottom of the plastic bottle. Were you correct?

Find the bottle with orange liquid.

Which measuring tool will you use?

Measure that liquid and see how much there is.

Look on the bottom of the plastic bottle. Were you correct?

Find the bottle with blue liquid.

Which measuring tool will you use?

Measure that liquid and see how much there is.

Look on the bottom of the plastic bottle. Were you correct?

Find the bottle with purple liquid.

Which measuring tool will you use?

Measure that liquid and see how much there is.

Look on the bottom of the plastic bottle. Were you correct?