

MEASUREMENT (MEASURING LIQUIDS)

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Subject

Basics Science

Prepared By

[Instructor Name]

Grade Level

3

Overview

This lesson plan covers teaching content for;

1. Measuring the volume of liquids in: ml, cl, l

Teacher Guide

Day 1/Lesson 1- 20 Mins

1. Group students into groups of 3-4.
2. Give each group one irregular shaped jar with water.
3. Each group will need a graduated cylinder, their note for recording and one irregular shaped jar filled with liquid.
4. Each group will take turns measuring each of the jars with water in them one at a time.
5. When one group has finished determining the volume of the liquid, they will record their measurement in their note under the corresponding jar.
6. Remind students to carefully return the water back into the jar for the next group to use.
7. They will then pass that jar (carefully) to the next group and work on measuring the next jar themselves.
8. Repeat this process until all groups have measured the volume in each jar and recorded their measurements on their tables.
9. The groups should now compare the volumes of the jars.

Guided Practice

Day 2/Lesson 2- 15 mins

1. Group students into 4 groups.
2. Hand each group a funnel, a cup, a recording note, pen and a container.
3. Tell them to carefully fill the container with water.
4. Instruct students to use a funnel when filling the containers with water.
5. Ask students to use the cup to pour water in the container one at a time.
6. Have them estimate how many cups of water the container will hold.
7. Remind them to record the actual amount of water the container can hold.
8. Carefully pour the water back into the dishpan.
9. Collect each group's recording notes and have a discussion with them.

Day 4/Lesson 4- 15 mins

1. Bring in a selection of sponges that have different sizes, shapes, and density.
2. Give each student a sponge and a cylinder.
3. Have students predict which sponges will

Objectives

Students will be able to:

1. Measure liquids accurately using graduated measuring cylinders, cups or jars.
2. State the metric unit of volume.
3. Compare the volume of liquids.
4. Record the results of investigations conducted.
5. Practice measuring the volumes of liquids.
6. Work cooperatively with their peers and apply their knowledge to a real-world problem.

Information/Instruction

1. Bring in containers that are cup, pint, quart, and gallon size.

Materials Required

- Irregular shaped jars
- water
- graduated cylinders
- funnels
- containers
- recording notes and pens
- sponges that have different sizes,

Additional Resources

- <https://buggyandbuddy.com/hands-on-measurement-activities/>
- <https://study.com/academy/lesson/vol-plan.html>
- <https://www.teacherspayteachers.com/12-Subject-Area/Measurement/Price-Range/Free/Type-of-Resource/Laboratc-Level/Fourth>
- <https://www.pinterest.com/ericaraem/volume-lesson/>
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Additional Notes

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2. Prompt students to think about which tool a scientist would use to measure the volume of a liquid.
 3. Allow students to share their thinking.
 4. Guide students to the understanding that the graduated cylinder can be used to measure volume.
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Assessment Activity

1. While students are working through the
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Teacher Guide

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10. Ask students to organize the jars from the least amount of volume to the most by listing them in order in their notes.

Day 3 /Lesson 3- 15 mins

1. Bring in different size containers to the class (bbq sauce, car oil, lotion, water bottles, milk bottles, soda bottles).
 2. Ask students which one would hold more water (at this point lots of them think the bigger or taller, the more it will hold).
 3. Partner students up and let them be in charge of one container (label each container with a letter).
 4. Have them use water, a funnel and 1 cup as a measuring unit to see how many cups are in their container.
 5. Make them test 3 times for accuracy.
 6. Bring them back together and discuss their results. If there were any major discrepancies.
 7. Check their work by measuring the container in front of them and come to a conclusion.
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Assessment Activity

1. Monitor for students' understanding and progress at every point of the activities.
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Guided Practice

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- hold the most water, arranging the sponges in order from least to greatest capacity according to their predictions.
 4. Place the sponges in a tub of water for 10 minutes.
 5. Let students squeeze the water into individual graduated cylinders to get an estimate of how much water each sponge held.
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	Teacher Guide	Guided Practice
measurement activities, circulate between groups and assist as needed.		
Summary		