

# Cups, Pints, Quarts, and Gallons

Volume means how much space something takes.

A sandcastle takes a certain amount of space. A bottle of water takes space. A book takes space. But how much?

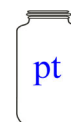
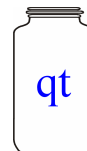
In this lesson you will learn how we measure the volume of water (or other liquids).

You will need

- water in a bucket or other big container
- a few food containers
- a coffee cup
- a drinking glass



- a quart jar
- a pint jar



- a 1-cup measuring cup



1. Fill the pint jar with water. Pour it all into the quart jar. Then fill the pint jar again and pour it into the quart jar. Is it now full (or close to full)?

It should be. It takes \_\_\_\_\_ pints of water to fill 1 quart jar.



2. Pour out water from your full quart jar back into the pint jar until the pint jar is full.

Is your quart jar now half full? (It should be.)

How much water is left in the quart jar? \_\_\_\_\_ pint.

3. Find out how many times you need to fill the one-cup measuring cup with water and pour it into the pint jar until the pint jar is full. \_\_\_\_\_ times.

One pint is \_\_\_\_\_ cups.

4. Find out how many times you need to fill the one-cup measuring cup with water and pour it into the quart jar until the quart jar is full. \_\_\_\_\_ times.

One quart is \_\_\_\_\_ cups.

5. Find out if a coffee cup measures MORE or LESS than the a 1-cup measuring cup—or exactly 1 cup. Do the same with a drinking glass.

6. Find three different empty food containers. Measure water into them, and find out how many whole cups of water you can fit into them. If you can still fit a little more, write YES.

|             | how many whole cups | Can you fit a little more? |
|-------------|---------------------|----------------------------|
| Container 1 |                     |                            |
| Container 2 |                     |                            |
| Container 3 |                     |                            |

7. At the next supper or breakfast time, do a little experiment. Before eating, measure exactly one cup of the food you are going to eat and then put it on your plate. Will it fill you up? Is it too much or too little food?

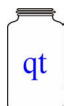
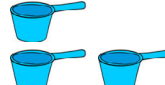
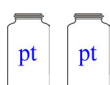
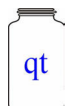
*This section is optional and is beyond the Common Core Standards.*

- |                                     |                      |
|-------------------------------------|----------------------|
| • A quart is abbreviated with “qt”. | 5 qt means 5 quarts. |
| • A pint is abbreviated with “pt”.  | 3 pt means 3 pints.  |
| • A cup is abbreviated with “C”.    | 2 C means 2 cups.    |

8. Fill in numbers on the blank lines. You will get help from your work on the previous page.

|                    |                   |                   |
|--------------------|-------------------|-------------------|
| a. 1 qt = _____ pt | b. 1 qt = _____ C | c. 1 pt = _____ C |
|--------------------|-------------------|-------------------|

9. Circle the amount that holds more liquid volume. Circle both if they hold the same amount.

|                                                                                                                                                                               |                                                                                                                                                                               |                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a.  OR  | b.  OR  | c.  OR  |
| d.  OR  | e.  OR  | f.  OR  |

10. Fill in with the words cup, pint, or quart.

- Mary drank 2 \_\_\_\_\_s of tea at the party.
- Mom bought 1 \_\_\_\_\_ of yogurt for the four children.
- Ron was quite thirsty and so he drank a whole \_\_\_\_\_ of water.
- The large pitcher can hold 2 \_\_\_\_\_s of juice.