

## The Challenges – Teacher Resources

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### How Much Water Is That?

#### Materials:

- Unmarked containers or jars of various sizes filled with water (colored water works best)
- Paper
- Pencil
- Water source (buckets of water will work if a water source is not available)
- Measuring tools
- Teaspoons
- Tablespoons
- Cups with markings
- Containers to measure ounces
- Gallon containers
- Liter containers
- 2-liter containers



#### Directions: (You may prefer to do this activity outside.)

- Part A
    - Provide materials for students' use. Students may work either individually or with partners.
    - Allow students to use the water provided to measure with the various units. (This is to help them understand how much liquid is in an amount.)
    - By starting with the smallest units, teaspoons, they should see that it is a very small amount and put 3 teaspoons of water into the tablespoon to see that they are equivalent amounts.
    - After they have had time to explore water measurements, have them put the open water sources away.
  - Part B
    - Display the jars or containers with colored water. Label the jars or containers (for example, jar 1, jar 2).
    - Tell students they have explored amounts of liquid using a variety of units of measure, both standard and metric.
    - Using paper and a pencil, have students look closely at each container and estimate the amount of colored water that each holds. They are estimating the capacity of the container based on the knowledge they gained from exploring. Therefore, no measuring tools are allowed for this.
    - When everyone has finished, measure the amount of water in each container. (You may need to measure in both metric and standard, depending on what your students chose to do.)
    - Have students check their work.
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