**Understanding Serving Sizes and Measurements**

*Fill in the table below to convert within the customary measurement system.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Capacity | Gallons | Quarts | Pints | Cups | Ounces | Pounds |
| 1 Gallon |  |  |  |  |  |  |
| 1 Quart |  |  |  |  |  |  |
| 1 Pint |  |  |  |  |  |  |
| 1 Cup |  |  |  |  | 8oz. |  |

**Big Question 1: Can you use capacity measuring tools when measuring weight? Why or why not?**  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**The Experiment:**

1. Measure out one cup of water, one cup of vinegar, one cup of oil, one cup of cream of wheat and one cup of rice.
2. Find the weight of each of the substances using the food scale.
3. Record your findings below.

|  |  |  |
| --- | --- | --- |
|  | Weight of One Cup | Rank from Heaviest to Lightest |
| Water |  |  |
| Vinegar |  |  |
| Oil |  |  |
| Rice |  |  |
| Cream of Wheat |  |  |

1. **Big Question 2: Which seems to weigh more, solids or liquids? What might be the cause of the differences?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **After looking at the various portion sizes on the labeled plates, match each portion size to a regular household object, so you will have an idea of what each portion size looks like. Write the object that best matches that serving size in the boxes below.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 4 ounces | ¼ cup | ½ cup | 1 cup | 2 Tbsp |
|  |  |  |  |  |