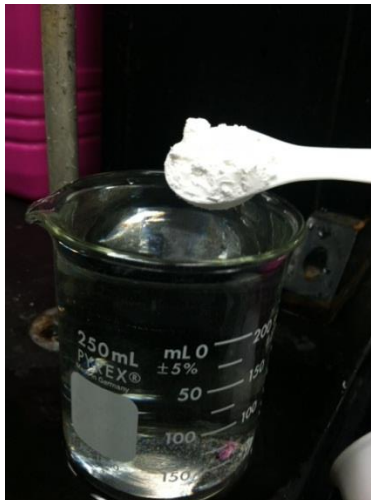




California State University of Bakersfield, Department of Chemistry

Hole-Y Water



Standard:

MS-PS1-2. Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.

Introduction:

Everything around us is made of atoms and molecules. Surprisingly, atoms and molecules are made up mostly of empty space. Here's a simple experiment to prove that a glass of water molecules contains a whole lot of nothing. Well, a lot of space.

Materials:

- Powdered sugar
- A cup of hot water
- A teaspoon

Safety:

- Always have an adult with you to help you during your experiment.
- Always wear eye protection and gloves when doing chemistry experiments

Procedure:

1. Fill the cup to the brim with hot tap water. Get the surface to bulge above the rim.

2. Without dipping the teaspoon in the water, CAREFULLY add a teaspoon of sugar to the water.
3. Repeat several times.

Questions:

How many teaspoons did you pour in before it overflowed?

References:

1. Billnye.com. <http://www.billnye.com/for-kids-teachers/home-demo-details/> (accessed July 17, 2012)