

California State University of Bakersfield, Department of Chemistry

Anti-Gravity Water



Standards:

5th grade, Physical Sciences, 1 g. Know properties of liquids such as water.

Introduction:

In this experiment, you will defy gravity! When the glass of water is turned over, the water does not fall out because the weight of the water increases the volume of the air in the glass, which creates a vacuuming effect. The water molecules also bond together creating surface tension.

Materials:

- A drinking glass with a round edge
- An Index card or piece of foil that is able to cover the top of the glass
- Water

Safety:

• It is better to do this in a sink or over a bucket

Procedure:

- 1. Pour water into the glass until it is half full.
- 2. Put the index card or piece of foil on top of the glass making sure that the opening is covered.
- 3. Place one hand over the index card or foil.
- 4. Flip the glass over with your other hand.
- 5. Slowly release the hand that is under the index card or foil.

Data and Observations:

Record your observations in this space

Anything you were not expecting? Describe it here.

Question:

What caused the water to stay in the glass while it was upside down?

References:

1. SteveSpanglerScience.com. <u>http://www.stevespanglerscience.com/experiment/anti-</u>gravity-water (accessed Jul 17, 2012).