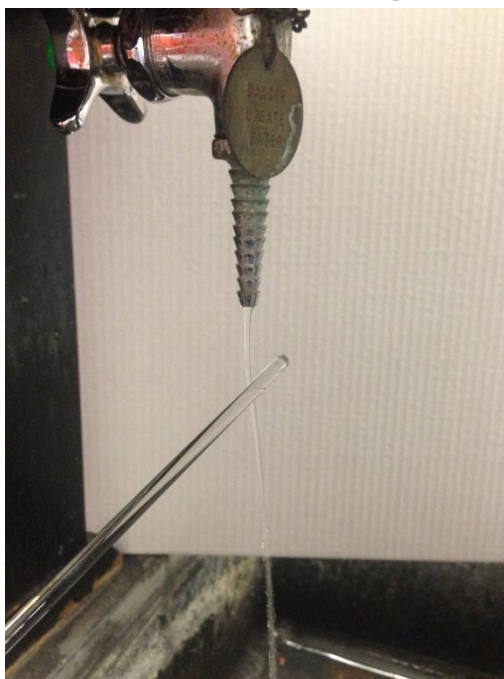




California State University of Bakersfield, Department of Chemistry

Water Bending



Standards:

5-PS1-3. Make observations and measurements to identify materials based on their properties.

HS-PS1-2. Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

Introduction:

Using a balloon, a stirring rod, and a water faucet, you can bend water. With these materials, one can generate a significant amount of static electricity. With water molecules being polar, it becomes easy to “bend” it because one side will become attracted to the static rod.

Materials:

- Water faucet with running water
- Latex balloon
- Glass stirring rod

This material is based upon work supported by the CSUB Revitalizing Science University Program (REVS-UP) funded by Chevron Corporation. Opinions or points of view expressed in this document are those of the authors and do not necessarily reflect the official position of the Corporation or CSUB.

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. Inflate the nylon balloon.
2. Turn on the faucet so that a slow stream of water comes out.
3. Grab the inflated balloon and rub it against the glass stirring rod to create a static charge on the glass stirring rod.
4. Slowly and carefully place the glass stirring rod next to the stream of water.

Data and Observations:

1. Observe what happens when you bring the stirring rod close to the stream of water and record your observations.

2. Why did this happen?

References:

1. <http://www.sciencebob.com/experiments/bendwater.php> (Date accessed: July 29, 2014).