**Surface Tension Activity**

Name of Activity: Can you center me?



***Fill in the blank:***

1. Cohesion: Water molecules are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to other water molecules. The \_\_\_\_\_\_\_\_\_\_\_\_\_ end of water has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ charge and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ end has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ charge. The hydrogens of one water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are attracted to the oxygen from other water molecules. This attractive \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is what gives water its \_\_\_\_\_\_\_\_\_\_\_\_\_\_ properties.
2. Surface Tension: Surface tension is the name we give to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of water molecules at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a body of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The cohesion of water molecules forms a surface “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” or “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.” Some substances ay \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cohesive force of water, which will reduce the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the surface “skin” of the water.

Name of Activity: The Magic of an inverse glass of water?



***Fill in the blank:***

1. Adhesion: Water molecules are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_to other surfaces. When the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces between the liquid molecules are greater than the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ forces between the liquid and the walls of the container, the surface of the liquid is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When the cohesive force between the liquid molecules are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than the adhesive forces between the liquid and the walls of the container, the surface of the liquid is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. There is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ difference between the room and the inside of the glass bottle. This difference cause a net force upward that cancel out the \_\_\_\_\_\_\_\_\_\_ of the water.
3. Capillary action is the result of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and adhesive forces. When a liquid flows through a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ space, the cohesive and adhesive forces act together to lift it against the natural [force](http://www.diffen.com/difference/Force_vs_Power) of \_\_\_\_\_\_\_\_\_\_\_\_\_. Wetting of a [paper towel](http://www.diffen.com/difference/Hand_Dryer_vs_Paper_Towels), water flowing up from the roots to the tip of a plant are a few examples of capillary action.

***Explore:***

1. Given:
   1. An empty container
   2. A container of water
   3. Rolled up paper napkin with one end in the container of water and the other end in the empty container.
   4. Predict what you think will happen and why.