

Name	

## Surface Tension Jar Demonstration Worksheet

1.	Draw a sketch of the inverted jar filled with water. Use arrows to show the direction of the following forces acting on the water: Gravity, external air pressure, pressure of air inside the jar, and surface tension.
2.	When the jar is inverted with the card in place, a small amount of water leaks out of the jar. Assuming that the card prevents air from entering the jar, how does the air pressure inside the jar change when water leaks out?
3.	If there is even a trace of soap or detergent in the water in the jar, the demonstration will not work. What effect does soap have on the surface tension of water? How does this relate to how soaps work?
4.	Draw the structure of a water molecule and show by means of a diagram the hydrogen bonds between water molecules. How many hydrogen bonds does each water molecule form?