

Name:

Period:

## **LAB 18: POLAR COVALENT BONDS**

### **BACKGROUND**

You have read that water has a polar covalent bond. This means that the two hydrogen and one oxygen in a water molecule are aligned in such a way as to create a positive side and a negative side.

Diagram a water molecule below and try to show the polar covalent structure.

| Best guess | Actual |
|------------|--------|
|            |        |

### **OBJECTIVE**

Demonstrate that water does have a polar covalent bond.

### **MATERIALS**

- ring stand and clamp
- small syringe
- balloon
- small beaker
- water
- apron & goggles

### **PROCEDURE**

1. Attach the clamp near the top of the ringstand.
2. Fill the beaker with water
3. Fill the syringe with water from the beaker
4. Attach the syringe to the clamp
5. Empty the beaker and place it under the syringe (to catch the water)
6. *Slowly* press the plunger on the syringe and observe the flow of water
  - a. Record your observations
7. Repeat steps 3 – 5

