Use your knowledge of water to decide which property of water is being demonstrated at each station. Choose from the following list of properties:

1. Temperature
2. Cohesion
3. Adhesion
4. Density
5. Solubility - Solvent

**Teacher Demonstration: Hot Water Balloon**

Materials: balloon filled with air, balloon filled with water, matches

1. Teacher will inflate 1st balloon with air and place a lit match underneath it.

**Observations:**

1. Teacher will inflate 2nd balloon with water and place a lit match underneath it.

**Observations:**

1. **Property of water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station #1: Dish-and-clips**

Materials: paper clip, petri dish, tweezers, water in a beaker, paper towels

1. Pour water into the petri dish until it is about half full.
2. After drying off the paperclip with a paper towel, use the tweezers to gently set the paperclip on the water.

**Observations:**

1. When finished, refill the dish if necessary; place the paper clip on the paper towel to dry.
2. **Property of Water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station #2: Sink or Swim**

Materials: tongs, ice cubes, beaker of water, beaker of ethanol

CAUTION: ETHANOL IS HIGHLY POISONOUS! DO NOT DRINK!

1. Using the tongs, place an ice cube in each beaker.

**Observations:**

1. When finished, leave materials as you found them. If more ice cubes are needed, notify your teacher.
2. **Property of Water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station #3: Stop on a Dime**

Materials: dropper, penny, beaker of water

1. Make a prediction of how many drops of water will “fit” on the dime before it spills over the edge.

**Prediction:**

1. Counting drops as you go, use the dropper to carefully add drops of water to the top of the dime.
2. Continue to add drops until water spills over the edge. Record the total number of drops.

**# of drops:**

1. **Property of Water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station #4: Much Color-ado About Nothing**

Materials: food coloring, 2 test tubes, 2 10-mL graduated cylinders, water in a beaker, oil in a beaker

1. Measure and add 5 mL of water to one test tube and 5 mL of oil to the other test tube.
2. Add 2-3 drops of food coloring to each test tube. Do not shake the test tubes
3. **Observations:**

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1. When finished, pour the test tube with water and food coloring down the sink, and pour the test tube with oil and food coloring into the garbage can.
2. **Property of Water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Station #5: Can you measure the heat?**

Materials: warm water supply, beaker, thermometer

1. Pour 75 mL of warm water into a 250 mL beaker. Record the temperature of the water every minute for 6 minutes. Record your data in the table below:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Time |  |  |  |  |  |  |
| Temp. |  |  |  |  |  |  |

1. Graph your data in the space below.
2. Empty beaker
3. What happens to the temperature of the water over time? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. **Property of Water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Post-lab Questions**

1. Describe the properties involved in each station.
2. Choose a property of water and give an example of how it is important to living organisms.