Name	Date	Period

# Properties of Water

Directions: Complete each of the following tasks. Make sure to watch for patterns and be prepared to explain some functions of water.

## **Property 1**

Materials: 2 cups and piece of paper towel

#### **Procedure:**

- 1. Take the paper towel and roll it as tight as you can; make it look like a rope.
- 2. Fill one of the cups almost full (3/4 full) of water.
- 3. Set the 2 cups about 1-2 inches away from each other.
- 4. Place one end of the paper towel in each cup and observe.
- 5. While waiting, continue on to the next activities, but remember to continue making observations while working.
- 6. What do you "see" the water doing with the paper towel?
- 7. Explain in your own words how you observed water flowing (moving) in this demonstration
- 8. When the activity is completed (it takes about 15 minutes) use a paper towel to dry and clean up your area.

## **Property 2**

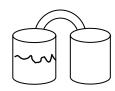
Materials: Balloon, paper cup with hole in the bottom, and water

#### **Procedures:**

- 1. Charge the balloon by rubbing it with a dry paper towel for about 10 seconds.
- 2. Fill the cup with the hole in it with water, keeping your finger over the hole.
- 3. Hold the cup 8 10 inches above the pan so the water will fall into it
- 4. Let the water fall through the hole, into the small container, then place the charged part of the balloon near the stream of water and observe what happens. Repeat if needed.

Draw a picture showing the how water reacted to the charged balloon.

- 5. Explain in your own words how water reacted.
- 6. Why do you think the water reacted this way to the balloon?
- 7. Wipe up the water and clean your area. Before moving on to the next activity, look at the water and paper towel experiment.
- 8. How has the water flowed with the paper towel for property 1?



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## **Property 3**

Materials: paper clips, small cup, paper towel, and pencil with an erasure

#### **Procedures:**

- 1. Fill the small cup about half full with water
- 2. Take a piece of tissue paper provided
- 3. GENTLY drop the tissue flat onto the surface of the water
- 4. GENTLY place a dry paper clip flat onto the tissue (try not to touch the water or the tissue with your fingers)
- 5. Use the eraser end of the pencil to carefully poke the tissue (not the paper clip) until the tissue sinks. With some luck, the tissue will sink and leave the paper clip floating!
- 6. How does the water surrounding the paper clip appear?
- 7. Try this activity again, only this time, add as many paper clips as you can before they sink. How many could you get to float on the water?
- 8. Does the shape of the paper clip affect its floating ability?
- 9. What do you think is happening that allows the paper clips to float, even though they should sink, as they are denser?
- 10. Use a paper towel to dry and clean your area.
- 11. How has the water flowed with the paper towel for property 1?

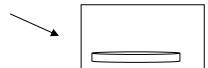
### **Property 4**

Materials: pipet and 1 penny

#### **Procedures:**

- 1. Place a paper towel on the table then place the penny on top
- 2. Fill the pipet with water
- 3. Place 1 drop of water on the penny and draw what it looks like —
- 4. Continue to slowly add more drops to the penny to see how many you can get before the water falls off the penny





- 6. Explain what happened to the water as you continued to add drops onto the penny.
- 7. What do you think allowed the water to continue to collect on the penny and not easily off?
- 8. Return all of the supplies and use a paper towel to clean and dry your area.
- 9. Go back to the activity for property 1to complete it