

# Molecules Matter

Name \_\_\_\_\_

Date \_\_\_\_\_

Period \_\_\_\_\_ Page \_\_\_\_\_

In the activity below, you will investigate some of the characteristics of water. You will also begin to model and explain, on the molecular level why water acts the way it does.

## ACTIVITY:

### Question to investigate:

Does water hold together well or come apart easily?

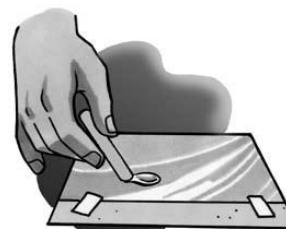
### Materials for each group:

- Water in a small cup
- dropper
- 2 popsicle sticks cut in half
- 2 index cards covered with wax paper.



### Procedure:

1. Use a dropper to gently squeeze out one drop of water but try not to let the drop fall completely out of the dropper. See how far you can make the drop hang off the end of the dropper without the drop falling.
2. Place 4 or 5 drops of water together on the wax paper to make a medium-sized drop.
3. Gently tilt the wax paper in different directions so that the drop moves.
4. Use a popsicle stick to slowly move your drop around the wax paper. Try using your popsicle stick to separate your drop into two.
5. Use your popsicle stick to move the two drops near each other. Then move one drop so that the two drops touch.

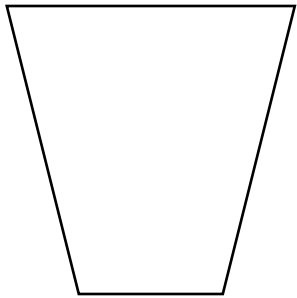


**WHAT DID YOU OBSERVE?**

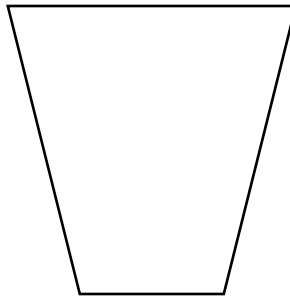
1. When you squeezed the drop of water out of the dropper, did the water break apart or did it hold together?
2. When you were pulling the drop around the wax paper, did the water seem to hold together or come apart easily?
3. When you tried to split your drop, did the drop separate easily?
4. Was it easy or difficult to make the drops come together?

**DEMONSTRATION:**

Your teacher placed a drop of food coloring in a cup of water.



Drawing 5 seconds after drop was added.



Drawing 1 minute after drop was added.

The color slowly mixed into the water without being stirred. What does this tell you about water molecules? \_\_\_\_\_

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