

IAN page

# MOLECULES MATTER

# QUESTION TO INVESTIGATE:

- ◉ Does water hold together well or come apart easily?

# KEY IDEAS:

**Chemistry:** The study of matter and what matter does.

**Matter:** 3 common types- solid, liquid, and gas.

# KEY IDEAS, CONTINUED.....

## Atoms and molecules:

An atom is the smallest building block of matter and a molecule is two or more atoms.

The rest of the key ideas will be finished at the end of the activity.

## ACTIVITY:

- ⦿ Do the activity as directed on the page called *Molecules Matter*, up to the demonstration. **(15 minutes)**
- ⦿ We will finish the Key Ideas after the activity and demonstration.

# QUESTIONS ABOUT ACTIVITY:

- ◉ When you squeezed the drop of water out of the dropper, did the water break apart or did it hold together?
- ◉ When you tilted the wax paper, did the drop split apart or stay together?
- ◉ When you were pulling the drop around the wax paper, did the water seem to hold together or come apart easily?
- ◉ When you tried to split your drop, did the drop split easily?
- ◉ What happened with the two small drops touched?

# DEMONSTRATION

- ◎ Observe your teacher as he does the demonstration. You will be drawing the food coloring in the water in the Demonstration section of your lab paper.
- ◎ Draw 5 seconds after it was dropped.
- ◎ Wait a minute, and draw it again.

- ⦿ How do your observations support the idea that water molecules are moving?

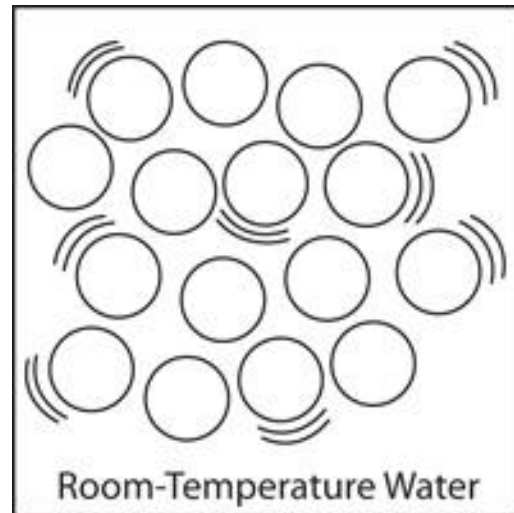


# ANIMATION OF THE MOLECULES IN LIQUID WATER:

Particles of a liquid.

# MOLECULES MATTER, PROCESSING

- The circles in this drawing represent water molecules.
- They are not in any exact order, but are near each other because of their attractions.
- The motion lines near some of the circles show that the molecules are in motion.



# WATER BALLOON



# KEY IDEAS, CONTINUED

The particles of a liquid:

- a. are attracted to one another,
- b. are in motion,
- c. are able to move past one another.

Being a solid, liquid or a gas is a **property** of a substance.