

## Dance of the Molecules

Solid      Liquid      Gas

Draw the molecules in each state  
(see instructions bottom of Page 37)

Explain the motion of the molecules in each state

Solids keep their shape because....

Liquids change their shape because....

Gases change their shape because....

Solids can't change their volume because...

Liquids can't change their volume because...

Gases can change their volume because...

### A heated discussion



Lattice



Eureka Video Questions (prog. 16-19)

- How do the "little lumps" move in solids?
- What is the scientific term for little lumps?
- What happens to the molecules in a solid as it melts to a liquid?
  - (as the solid gets warmer)
  - (as it melts)
  - (when it is a liquid)
- What happens to molecules when liquids cool down and solidify (freeze)?
  - (as the liquid gets colder)
  - (as it solidifies or freezes)
  - (when it is a solid)
  - Why do these things happen?
- What is evaporation? Change from a \_\_\_\_\_ to a \_\_\_\_\_. What happens to the molecules?
- What is condensation? Change from a \_\_\_\_\_ to a \_\_\_\_\_. What happens to the molecules?

"Dance" of the molecules: 1. Make a picture of the "dance of the molecules" in a **solid**, a **liquid** and a **gas**. Be sure to show how they move and how close together they are for each state of matter. 2. Under each, describe their motion in words. 3. Draw a **thermometer** between each section to show the melting point and boiling point of water.

Solid	Liquid	Gas