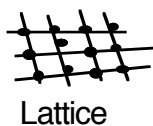


# A heated discussion



Lattice

Eureka Video Questions (prog. 16-19) To watch videos, go to Mr. Needham's website for links to videos on YouTube:

<http://www.nhusd.k12.ca.us/o/Chavez/Needham/Mr.N.html>

## ABSENCE MAKE UP:

Copy the answers onto the worksheet, tape into your notebook

1. How do the "little lumps" move in solids?

**moving back and forth (vibrating)**

2. What is the scientific term for little lumps? **molecules**

3. What happens to the molecules in a solid as it melts to a liquid?

a. (as the solid gets warmer) **molecules move faster due to heat**

b. (as it melts) **force of attraction is no longer strong enough to hold them together so molecules burst out of lattice pattern (as if invisible spring breaks)**

c. (when it is a liquid) **molecules move freely past each other**

4. What happens to molecules when liquids cool down and solidify (freeze)?

a. (as the liquid gets colder) **molecules slow down as they lose heat**

b. (as it solidifies or freezes) **molecules are attracted to other molecules**

c. (when it is a solid) **molecules form a lattice where each is kept next to its neighbors**

d. Why do these things happen? **loss of heat energy**

5. What is evaporation? Change from a \_\_\_\_\_ to a \_\_\_\_\_. What happens to the molecules? **Molecules gain heat, move faster and pop out into the air**

6. What is condensation? Change from a \_\_\_\_\_ to a \_\_\_\_\_. What happens to the molecules? **Molecules lose heat, slow down and are attracted to other molecules and get closer to each other as a liquid.**

USE TOP HALF OF NEXT NOTEBOOK PAGE:

**"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**.