WATER CYCLE DIAGNOSTIC QUESTION CLUSTER
05.18.10
Diagnostic Question Cluster Project
Michigan State University

1. When water vapor condenses
a. water molecules become less dense
b. water molecules are bonded to one another
c. the hydrogen and oxygen atoms combine to form H_2O gas
d. the temperature of the water decreases

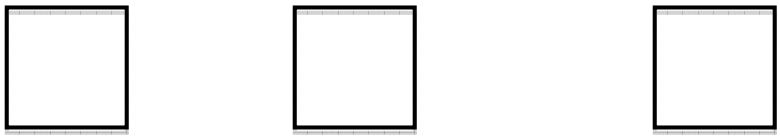
2. If 30 X 10^6 km of ice on earth melts, most of that water will eventually reside in which reservoir?
a. oceans
b. atmosphere
c. lakes and streams
d. ground water

3. When a teapot boils we see a white cloud rising from the spout. Why does the cloud disappear?
a. water in the cloud condenses
b. water in the cloud evaporates.
c. water in the cloud break a part to form H+ and OH- ions.

4. Thermohaline circulation is similar to atmospheric cricualtion because……..

5. Show the differences between solid, liquid and gaseous water by drawing water molecules in each of the three boxes below. Represent a water molecule by a single circle. You do not need to show the individual atoms that make up the molecules.

solid liquid gas



6. Complete the box and arrow diagram. Identify the state of water (solid, liquid or gas), the reservoir, and the process that moves or changes the water.