**Lesson 4: Lesson Question:** *What makes liquid water, ice and water vapor different?*

|  |  |
| --- | --- |
| **A. What activity did we do?** | *We used to the PhET simulation to look at how the particles in water move around when water is a solid, a liquid, and a gas.* |
| **B. What evidence did we gather?** | We observed that in a solid, particles are tightly packed together, they do not move from their position, they only jiggle/wiggle in place.  In liquids, particles touch each other but they can move around. They also move faster than solids. They slide and glide but tend to hang at the bottom of a container.  In a gas, particles move all over and they will fill up the whole space. They moved faster than the liquids. |
| **C. My answer to the lesson question:** | Water as a solid, has molecules that are very close together and jiggle in place. They have less energy than liquids and gases - move slower.  In liquid water, molecules can touch each other but are able to move around. They move faster than solids because they have more energy but have less energy than gases.  In water vapor, molecules have more energy than liquids so they are spaced out. They move very fast and collide into each other. |
| **D. Connecting my ideas to the Unit Challenge:** | Water in different phases on the present day lot model have molecules that move at different speeds depending on the state of water. Water found in a puddle or river moves around relative to each other while solid water in the snow pile or ice in the winter do not move much and jiggle in place. Water as a gas in the air has molecules that move very fast and only bump into each other. We can NOT see this water. The molecules mainly gain energy from the sun. |