ANALYZE:

13. How was this substance similar to water in each state of matter? How was it different? The movement of the molecules were very similar to that of water. When in a solid the molecules in both were tightly packed all lined up next each. When was not tightly packed than water and moved less. This was the case with the liquid form of neon and water as well. In gas form they looked the same except water moved around much more.

14. Were your predictions (see p. 1) correct or incorrect? Explain. My prediction was more or less correct. I correctly predicted the movement of the molecules. However, they did move around quicker than I had originally thought.

BONUS: Optional, worth up to 10 points added to the lab's final grade

15. Choose a substance other than water from the menu on the right side of the program. Use the slider to add and remove heat. Based on what the molecules do, figure out the approximate temperatures of the melting point and boiling point of this substance. (Hint: The temperatures given when you click solid, liquid, and gas are NOT the melting and boiling points.)

Substance: Argon

Melting Point: 57 K

How did you figure it out? I froze Argon as a solid then heated it up until it started to act like a liquid.

Boiling Point: 92 K

How did you figure it out? I heated the molecules up further until they started to break apart. I recorded the temperature just before they broke apart.