Name_____Date_____ Pd____

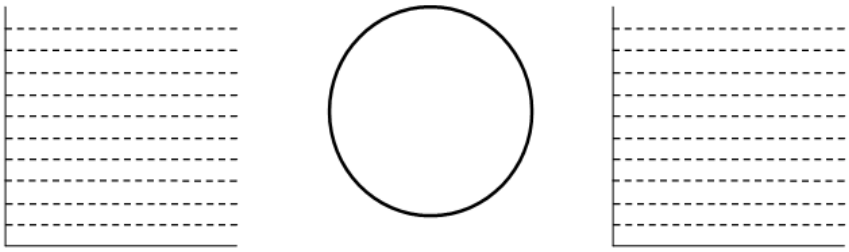
(Edited version for public review)

1.3 Act 5 More Energy Bar Charts

Directions: For each of the situations described below, use an energy bar chart to represent the ways that energy is stored in the system and flows into or out of the system. Next to each diagram describe how the arrangement and motion of the particles change from the initial to the final state.

1. Some of the water you spilled on your shirt evaporates.

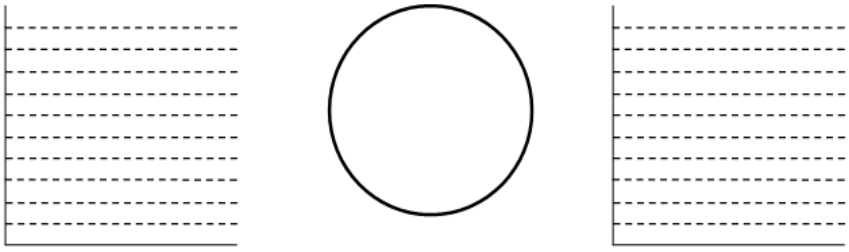
Initial **Energy Flow** **Final**



E_{th} E_{th}

2. Water vapor in the room condenses on a cold surface

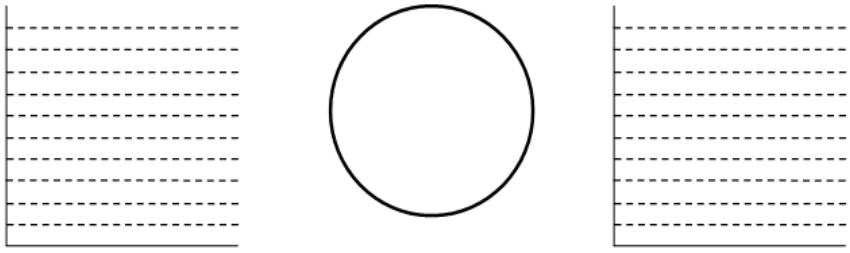
Initial **Energy Flow** **Final**



E_{th} E_{th}

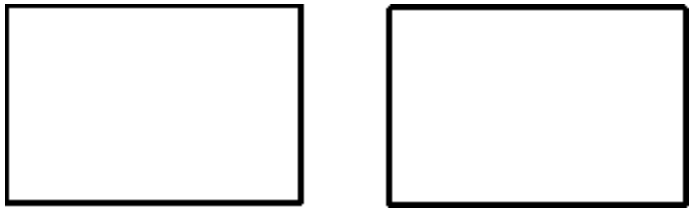
3. A solid bar of lead is heated until it melts completely.

Initial **Energy Flow** **Final**



E_{th} E_{th}

4. During boiling, bubbles appear in the liquid water. In the boxes below represent the arrangement of particles inside the liquid water and inside a bubble.



liquid water bubble

What is inside the bubble? Why do you ..

(Additional materials available in members' resources)

5. In what ways are liquid water and water vapor the same? How are they ..

(Additional materials available in members' resources)

6. You decide to boil water to cook noodles. You place the pan of water on the stove and turn on the burner.
   a. How does the behavior of the water particles change as the pan of water is heated?

   b. What about your answer to (a) would change if …

(Additional materials available in members' resources)