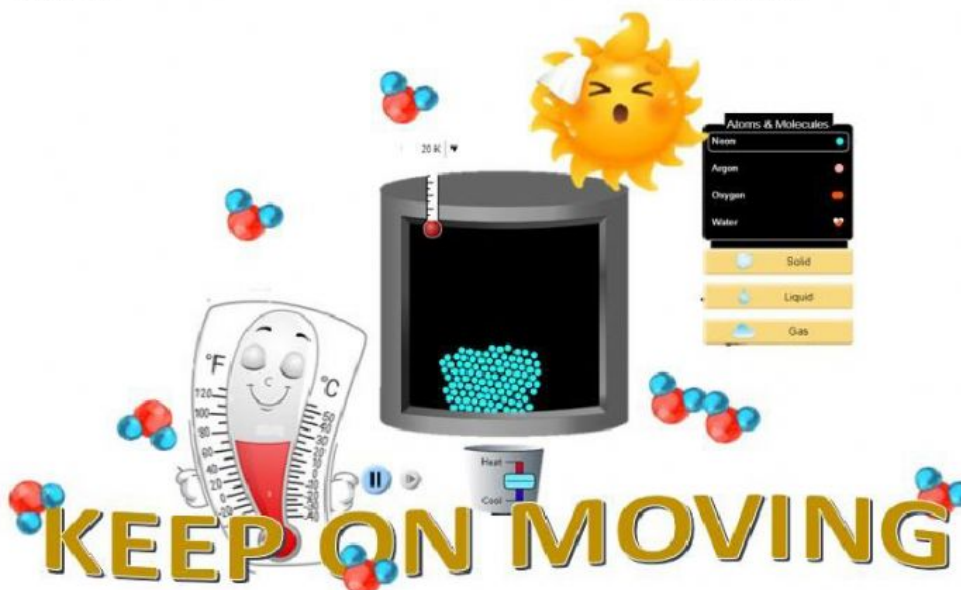


**NAME:**

**Section:**



### Activity 1: KEEP ON MOVING!

**MELC:** Differentiate between heat and temperature at the molecular level

**DIRECTIONS:** Using the PhET simulator found in this link: <https://tinyurl.com/matter-molecules>, answer the questions below. Make sure to re-type the link in another browser.

Be guided with this rubric:

Score/s for each question	Criteria
0	Question is left blank or incomplete
1	Response includes an answer but does not include any or includes very minimal reasoning.
2	Response includes an answer and detailed reasoning.

<https://peerinstruction.files.wordpress.com/2013/02/jitt-rubric1.png>

**What to do:**

1. To explore the simulation, click the STATES icon.
2. At the top right corner, select the type of element or compound from the Atoms & Molecules tab.
3. Choose which phase of matter the element or compound is.
4. Change the temperature in the adjustment bar located at the lowest part.
5. Start the simulation and answer the questions.

**Questions:**

1. What happens to the molecules of ice when temperature increases? Explain.
2. Describe the molecules of water vapor when temperature increases.
3. What happens to the molecules of water as the temperature drops? Explain.

4. Compare the molecules of Neon, Argon, Oxygen and water at liquid state when the temperature is at 100 Kelvin.

5. Why do molecules move so fast when heated?