Name: _____
Date: _____
Period: _____
Time: _____

Change of State Lab

1. Focus Question:
   How will the molecules move as ice melts? How does it change states of matter? What is melting and boiling point?

2. Hypothesis:
   If the ice melts **then** the molecules will be positioned differently **because** _____.

3. Plan:
   - Materials: goggles, hotplate, ice, beaker, thermometer, pencil, lab notebook
   - Procedures:
     1. Bring goggles, beaker, and hotplate to lab station
     2. Fill your beaker up to the 200 mL line with ice.
     3. With the hotplate OFF, place your beaker on the hotplate and put the bulb of your thermometer in the ice. Stir the ice for **2 minutes**.
     4. Take the first reading of the thermometer (time 0).
     5. Turn the hotplate to **HIGH** and continue stirring the ice. Do not let the thermometer touch the sides of the beaker or it will break. Do not let the bulb touch the bottom of the beaker or it will get too hot and burst.
     6. Continue stirring and taking readings of the temperature every **30 seconds until the water boils for 3 minutes.**
     7. When finished, clean and dry your work area.
     8. Graph data (line graph)
     9. Draw conclusions

4. Data:
Use this data sheet to record the temperature of the H_2O every 30 seconds until it has boiled for 3 minutes.

Time	Temp (Celsius)	Time	Temp (C)	Time	Temp (C)
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

5. Data Analysis: Please see graph paper.

6. Conclusion: *Write detailed conclusion here.*