

Phase Change Lab

Name: _____

Purpose: To understand the behavior of molecules in each **phase** of matter.

To understand the behavior of molecules **during** a phase change.

To understand the **phase change graph** of any substance.

Your job is to record the temperature in one minute intervals of a sample of water (starting in the solid phase) that is heated until it boils for three full minutes.

1. See setup of lab equipment at right.
2. Decide how you and your group would like to present your data to the rest of the class. Use the area below and the back of your paper to collect and present your group data.
3. Obtain a sample of ice and a thermometer from your teacher. Immediately record the initial temperature and start the timer.
4. Begin heating the sample and record the temperature of the water every minute until the water has boiled for 3 straight minutes.



Here is the Data Collection Video to use for the Lab: <https://www.youtube.com/watch?v=jZi5NSu1Et4>

Time (min)	Temperature (°C)		Time (min)	Temperature (°C)
0			11	
1			12	
2			13	
3			14	
4			15	
5			16	
6			17	
7			18	
8			19	
9			20	
10			21	

How to GRAPH your results on the next page!

Whether you choose choice 1 or 2 for graphing watch this video of the setup and explanation!

- <https://www.youtube.com/watch?v=PRizV-wAGKA>

Choice 1. Youtube video on: [How to create a line graph](#)

Choice 2. Find a piece of graph paper to hand graph like me. I found this one online that fits this particular lab very well. You can print it off. [Online Graph Paper to Print](#)

Insert your graph or a picture of it below.