

Intermediate Science 7
Unit 2: Heat
Core Lab 1: “The Plateau Problem”



Name: _____

Date: _____

Partners:

Problem: What happens to the temperature of water while it changes state?

Materials:

2 laboratory thermometers	Stirring rod	Hot plate
Kettle	2 beakers	Watch
Crushed ice	Ice-cold water	Hot water

Hypothesis 1: [1]

While water melts from solid ice to liquid water, the temperature will (drop/ stay the same/ increase) because

Hypothesis 2: [1]

While water boils from a liquid to a gas, the temperature will (drop/ stay the same/ increase) because

Procedure: [7]

Refer to page 166 of text. Identify the following

In this Activity, you are measuring time and temperature. Indicate the: [2]

Independent Variable:

Dependent Variable:

Observations:

Time (min)	Temperature of Melting Ice ($^{\circ}\text{C}$)	Temperature of Boiling Water ($^{\circ}\text{C}$)
0		
3		
6		
9		
12		
15		

Analysis:

1. Draw a line graph for melting ice and for boiling water to show the temperature - time observations. Instead of joining the points dot- to- dot, draw a smooth line or curve that passes through or between the points (a line of best fit) [10]

Title: _____



