Grade 7 Science Thermometer Lab

Name: _____ Lab Partner #1: _____

Lab Partner #2: _____ Lab Partner #3: _____

You will be given two beakers into which water will be poured. Your team's task is to measure the temperature with the thermometers given. You will do this at 5 minute intervals and see if the temperature changes.

Remember to use the thermometers carefully as they are made of glass. Remember that you are to hold the top of the thermometer and wait for the red liquid to stop moving – about 1 minute.

Anyone not behaving respectfully, will be asked to sit out of this experiment due to safety reasons.

Materials

2	beakers
1 or 2	thermometers
~200mL	cold water
~200mL	hot water

Stopwatch/timer

Hypothesis

What do you think will happen?

Observations (Data)

Time	Beaker 1 Temp	Student measuring	Beaker 2 Temperature	Student Measuring
0				
5				
10				
15				
20				
25				

Analysis

1. Explain what happened to the temperatures.

Beaker 1 -

Beaker 2 -

2. Using the Particle theory of matter, what happened?

3. Knowing that energy cannot be created or destroyed, where did the heat or thermal energy go?

4. What evidence do you have of the above answers?

Conclusion/Error Analysis/Questions

1. How would you improve this experiment?

2. If you wanted to keep the temperature the same as long as possible, what would you do?

3. If you wanted to change the temperature as fast as possible to room temperature, what would you do in each case?