Exploring Phase Changes

Purpose: To explore phase change temperatures of a solution.

Procedure:

1. Fill a 600 ml beaker with about 200 ml of ice.

2. Connect a lab quest to your computer, with a thermometer.

3. Heat with a Bunsen burner and use Logger Pro to record the temperature until the solution has been boiling for four minutes. Stir gently until the ice melts. REMEMBER TO PROTECT YOUR CORD.

4. Save the graph on your computer, with your name on it.

Use your graph to answer the following conclusion questions.

1. Did the temperature CONTINUALLY change?

2. What was the approximate temperature of the melting point?

3. What was the temperature of the boiling point?

4. Temperature measures kinetic energy. Draw the section of your graph that shows change in kinetic energy.

5. Draw a section of your graph that shows no change in kinetic energy.

6. Based on the graph, which requires more energy: Melting, or Boiling?