

Name: \_\_\_\_\_ Lab Section: \_\_\_\_\_ Date: \_\_\_\_\_

### PreLab: Specific Heat and Heat of Fusion

**Instructions:** Prepare for this lab activity by answering the questions below. Note that this is a **PreLab**. It must be turned in at the start of the lab period. Time cannot be given in lab to perform PreLab activities. After the start of lab activities, PreLabs cannot be accepted. Explain your answers. Points will be taken off if your work is not neat and well organized.

1. (5 points) Given that the specific heat of water is  $1.00 \text{ cal / (g} \cdot \text{ }^\circ\text{C)}$ , what is the specific heat in  $\text{Joules / (kg} \cdot \text{ K)}$ .
  
  
  
  
  
  
  
  
  
  
2. (5 points) If 750 grams of a metal requires 125 calories of energy to raise its temperature by 10 Kelvin, what is its specific heat?
  
  
  
  
  
  
  
  
  
  
3. (5 points) How much heat is gained or lost when 350 grams of ice melts?