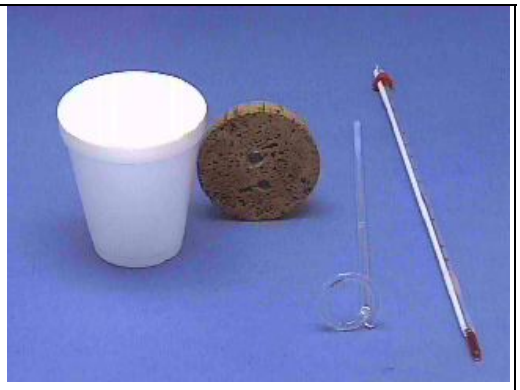
Pre-Lab Assignment:
Determining the Specific Heat of a Metal



DATA TABLE	
Mass of metal shot	25.0 g
Mass of cool water in Styrofoam cup	100.0 g
Initial temp of metal shot	99.6 °C
Initial temp of cool water in Styrofoam cup	22.4 °C
Final temperature of water + metal in Styro cup	26.1 °C

Use the above pictures and data to answer the following questions.

1) What is the specific heat of water?
2) Design an experiment to determine the specific heat of a metal. The pictures and data above will guide you and give you some ideas. (Hint: $Q_{lost} = - Q_{gained}$)

3) Calculate the specific heat of the metal from the data above.
Hints: $Q_{lost} = - Q_{gained}$ and $Q=mC\Delta T$

4) What is the identity of the metal, based on your answer to #3? (Use p. 72 of your textbook.)