

POST-LAB QUESTIONS: Answer these questions in the space provided. USE COMPLETE SENTENCES and be specific, including lots of detail.

1. We assumed that all of the energy given off by the burned food was taken in by the water in the can.

a) Was this true? Why or why not?

b) If some energy given off by the food was not taken in by the water, what piece of data would change?

c) How would it change? Would it go up or down?

d) How would the data change your calculations for the amount of energy absorbed by the water?

e) How would the energy per gram contained by the food that you calculated change?

A calorimetry experiment was conducted to find out the mass of potato chips that should be put in a new "100-Calorie" package. The data collected is in the following table:

Mass of water used	1000 g
Initial temperature of water	25 °C
Initial mass of potato chips before burning	28 g
Final temperature of water	36 °C
Final mass of potato chip after burning	14 g



- a) How much energy (in calories) is taken in by the water?

- b) How many kilocalories (or Calories with a capital "C") is this?

- c) How many grams of potato chips were burned?

- d) How many kilocalories (Calories) are in 1 gram of potato chips?

- e) How many grams of potato chips should be put in the "100-Calorie" package?