Name _____ Period _____ Date _____

Activity 3.1 Calorimetry Post Lab

1. Your class burned three items: marshmallows, potato chips, and cooking oil. What type(s) of food molecules (**carbohydrates, proteins, fats**) are in each of the items? Look on labels

Marshmallows ___Carbs_____Protein_____Fat_____

Potato Chip ___Carbs_____Protein_____Fat_____

Cooking Oil ___Carbs_____Protein_____Fat_____

2. In general, which food did you think released the most energy? _____

3. Name three or more variables that could have influenced the calories that you calculated.

_____, _____, _____, _____, _____

4. In this experiment, we kept all variables the same except for _____.

5. How do you measure the exact amount of energy the food releases? _____

_____

_____

6. Rank the foods in order from most to least in terms of the amount of energy released when burned.

1. _____ 2. _____ 3. _____
most least

7. How many FOOD calories did each food produce?
Marshmallow _____Cal Potato Chip _____Cal Oil _____Cal

8. What problems might you have had that caused the final food Calories to be off? List five.
(These are called **Sources of Error**)
A. _____
B. _____
C. _____
D. _____
E. _____

9. What might have been a problem with the way we measured the energy in oil?

10. How would you change the experiment to get more accurate results?