**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Specific Heat**

Guiding Question: Which substance is a better conductor of heat: marbles or copper?

Pre-lab Questions:

1. Explain what a calorimeter is used for.
2. Circle the word(s) that best describe your understanding of heat conductivity. Then write a scientific explanation to defend the prediction you chose.

**Prediction**: Marbles have a (similar / different) heat conductivity value than copper.

**Reasoning**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. What are the variables of this experiment?
2. What should be the constants of this experiment?

Data: My group is testing the specific of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Record ALL measurements:

Calculations: Calculate the specific heat of your substance.

Compare your specific heat to a group that had a different substance.

Questions:

1. The specific heat of glass is actually 0.840J/gC. Calculate the percent error.
2. The specific heat of copper is actually 0.385J/gC. Calculate the percent error.
3. Explain the transfer of heat between the marbles/copper and the water.
4. Construct a **claim** that supports or contradicts the prediction made in the pre-lab questions.
5. Provide **evidence** that supports your claim. Use your **reasoning** skills to explain why your evidence is relevant.
6. **Justify** the steps you took to obtain the evidence you obtained.