

Group
Name:

Experiment 5: Calorimetry Design Proposal

LibreTexts page: [5: Calorimetry](#)

(<https://chem.libretexts.org/link?214682>)

This worksheet is to be used for the [Experiment 5: Calorimetry](#) in the class LibreText. Each group will create a proposal to determine the calorimetry constant.

At 11:30 AM the breakout groups will adjourn and each group will present their proposal to the class.

Supplies

- 100ml Graduated cylinder (TC)
- Plastic funnel
- Calorimeter
- Two thermometers
- Hot and cold water

Experimental Design Parameters you need to account for in your proposal

- Surrounding conditions
- Temperature of the water
- Spills
- Accuracy of the graph

Role	Name
Manager	
Theoretician	
Engineer	
Analyst	
Spokesperson	

1. Introduction & Overview

- Team works, Theoretician is the scribe, but everyone should contribute
- Write 2-3 sentences for this section and describe what calorimeter constant is and why you need to use it in your calculations.

2. Experimental Design

- Team works, Engineer is the scribe, but everyone can contribute
- Show how you are going to obtain your data
- Show how you are going to minimize the potential errors

3. Error analysis of the design proposal

- Team works, Analyst is the scribe

- Explain how each of the errors that you discussed in part 2 would affect your results and conclusions. This **must state** how the error will cause you to overestimate or underestimate the calorimetry constant.

4. Safety evaluation

- Team works, Manager is the scribe
- Define protocols that ensure that this experiment will be performed in a safe and prudent manner.

5. Presentation

- Team works, Spokesperson is the scribe
- Prepare a brief 3 minute presentation of your proposal.