

Specific Heat Lab

Procedure

Make a chart with Quantity Measured/Symbol for Measurement/Instrument Used. Briefly, but completely, describe the procedure for this lab – and include labeled sketches.

Data

Arrange your data in a table, included calculated values, with headings and units.

Graphs

Graph temperature and energy added to the beaker of water. Include appropriate title, axes labels and units. Draw a best fits line for your data.

Questions

- 1) Explain (in words) how to use the data provided to find the energy added to the water. Show one example of your calculations.
- 2) Find the equation of your best fits line. Show your work and include units.
- 3) Using the correct physics equation, the slope of your best fits line and other information collected, find the specific heat of water. Show your work.
- 4) Use the accepted value of the specific heat of water to find the percent error of your experimental value.

Error Analysis

Thoroughly explain what the main sources of error are for this lab, and how you would correct them.



Water phase change