

The Scientific Method Worksheet

Experiment #1

Data Table

Cup	Initial Temp. (°C)	1 min	2 min	3 min	4 min	5 min	6 min	7 min	8 min	Final Temp. 9 min	ΔT (°C)
A											
B											
C											
D											

Post-Lab Analysis

- Write a conclusion based on the data gathered from the experiment. Include a summary of the results and whether or not your hypothesis was supported by the data. For example, a conclusion may begin in the following manner. "Cold water in cup X increased in temperature the least over a 9-minute period, which supported our hypothesis."
- List the variables other than the cup material that may have affected the outcome of this experiment.
- Were any of the variables listed in question 2 not controlled? In other words, were some of the variables different for some or all of the cups? Explain how the uncontrolled variables may be possible sources of error in this experiment.
- How could the procedure be improved to better control all the variables and increase the reliability of the data?