

Experiment 2.11 – The Mass of Ice and Water

Purpose

- Determine if there is a change in mass when ice melts
- Calculate the change in mass of ice when it melts

Hypothesis

- Create a scientific claim to whether or not you think the mass will change when ice melts

Materials

- Plastic Vial
- Ice
- Electronic Balance

Procedure

1. Place a small amount of crushed ice in a vial (the more ice that you have the longer it will take to melt).
2. Wipe off the outside of the vial. Mass the vial containing the ice and record to the nearest 0.01 g.
3. Wait for the ice to melt. How can you speed this process up?
4. After the ALL THE ICE has melted, wipe off the outside of the vial. Mass the vial containing the melted ice and record to the nearest 0.01 g.

Data Table

Table 1

Mass of System Before Melting	
Mass of System After Melting	
Change in mass (Δm)	

Table 2

Group #	Change in mass (Δm)	Group #	Change in mass (Δm)
1		9	
2		10	
3		11	
4		12	
5		13	
6		14	
7		15	
8		16	

Observations

- Make 3 observations about the lab.

Graph

- Create a histogram of the class data.

Calculations

- Change in mass calculation

Questions

- 4 bullet point questions on pg. 37.

Conclusion

- See the "How to Write Up A Lab" File