

Inquiry/driving Questions:

- Is the total mass the same before and after a chemical reaction?

Predictions/hypothesis:

- I think mass will be conserved in a chemical reaction because in previous labs there was no obvious mass change after a chemical reaction

Experimental design:

- Weigh the reactants and their containers
- Mix the solution to make them react
- lower the test tube of one solution into the flask without letting them react
- Seal the flask
- Turn the sealed flask over to mix the solutions and start the reaction

Materials:

Flask of calcium carbonate
Test tube of sodium chloride
Scale

Observations:

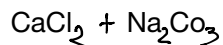
Mass of reactants:
Calcium solution- 6.6
Sodium carbonate solution 128
Total mass= 134.6
Mass after chemical reaction= 135.4

How do you know that a chemical reaction took place:
Because the reactants changed colour to milky white and created a foam

Conclusion: (confirm or deny your predictions with supporting evidence, explain possible errors, ask more questions)

My conclusion is that the total mass did change after the chemical reaction by .8 but that could have been for multiple reasons. We could have not measured exactly the first time or the condensation could have made the weight of the glass heavier

3. The product of this chemical reaction are calcium carbonate and sodium chloride. Write a word for this equation



4. I think the substance might have been a little bit of H_2O because it wouldn't take part in the chemical reaction

5. I think I could see the sodium chloride because that's what turned it white and made the foam