

Name: _____ Per: _____ Group# (scale #): _____

First Law of Chemistry – Law of Conservation of Mass – Lab
RUBRIC (Std 3)

This document needs to be the first two pages of your formal lab write-up. Your entire write-up will be word processed except for the last page.

Pts Earned	Pts Possible	Section & Requirements
	2	1. RUBRIC – two pages
	1	2. Purpose section: is there
	1	3. Materials section: is there
	1	4. Chem Reactions sec: is there
	10	5. Procedure section: REVISED – typed, has at least 30 steps, clearly defining every step needed to do this lab
	10	6. Observations section: the data table, all masses to 3 decimals, volume of phenol red 2 decimals. Below data table, 7 typed lines minimum of your own observations
	10	7. Conclusion: needs to have <u>explanations</u> of <u>observations</u>
	10	8. Procedure – handwritten, stapled at end
	45	TOTAL POINTS

rev 9/14/18

If your scale # is not on your report,

Detailed explanations for RUBRIC

Your write-up will be formal, word-processed and printed.

One more thing you need to know about:

As CaCl_2 dissolves in H_2O , it produces heat. This is called the **“heat of solution”**, or heat produced by the dissolving process.

Your group's scale # must be in the heading of your paper and all papers from your group will be stapled together. You will need the following sections:

- 2 pts 1. **RUBRIC** – this is a 2 page document, your name, period & group number need to be filled in
- 1 pt 2. **PURPOSE** – you may copy the purpose as stated in [First Law of Chemistry – Conservation of Mass](#)
- 1 pt 3. **MATERIALS** – you may also copy the materials section.
- 1 pt 4. **CHEMICAL REACTIONS BEING OBSERVED** – you may copy the materials section also.
- 10 pts 5. **PROCEDURE (REVISED & typed)** – This will be **your** procedure. Nothing is copied in this section. Everything is your own creation, updated based on what you learned by doing this lab yourself. Start with the procedure you wrote before the lab, and make the changes/additions/deletions you know are needed after completing the lab. Be detailed!
- 10 pts 6. **OBSERVATIONS** – Copy the data table from [First Law of Chemistry – Conservation of Mass](#) and fill in all of the data. You will also need to write below the data table what you actually observed during the lab. Describe color changes and what they mean. Remember red means base and yellow means acid. Temperature changes (which side gets hot and which gets cold) and all of the other things that are listed in my paper under the observations must be included here.
- 10 pts 7. **CONCLUSIONS** – Conclusions are statements you make that are **BASED ON** your observations you have written in section “6 OBSERVATIONS” above. **DO NOT RESTATE OBSERVATIONS UNLESS THEY ARE BEING USED AS A BASIS FOR ONE OF YOUR CONCLUSIONS.** Conclusions may include, but are not limited to:
- Which reaction is endothermic and which is exothermic and how you know.
 - An explanation of why you think the weight stayed the same or didn't. The Law of Conservation of Mass is true. So, if the mass of your sealed bag before and after the reaction is different, you need to explain why. If your mass changed, your source(s) of error should include anything in the procedure, equipment, supplies etc that could explain why the mass changed, if it did.
- 10 pts 8. **PROCEDURES (original, hand-written & STAMPED)** – This is your hand-written procedure that you got stamped several days ago. This is stapled to the end of your formal word-processed write-up. All stamped procedures will receive 5 points.

rev 9/14/18