

OUTLINE FOR WRITING UP A SCIENCE LAB

Title of Lab

Date

I. **PURPOSE**

Problem, hypothesis, question or phenomenon

- a description of what the purpose of doing the lab is. What is being tested? What does the lab try and show or prove?

II. **MATERIALS**

- a detailed list is necessary so that another scientist can reproduce the experiment in exactly the same way.

III. **PROCEDURE**

- a careful explanation of how to set up, and carry out the experiment. All pertinent information has to be included. The write up is the main resource for others to reproduce the experiment.

IV. **DIAGRAM**

- must be done extremely carefully and labeled accurately to further clarify how the experiment was carried out.

V. **OBSERVATIONS**

- although they are subjective, a clear, detailed list of what was noticed must be kept. Small seemingly insignificant details can prove to be important later on, so this aspect of a lab write-up is extremely important.

VI. **CONCLUSION**

- what, in fact, was proven or shown. What were the results?

VII. **SOURCES OF ERROR & IMPROVEMENT**

- an analysis of all aspects of the experiment should be done to further the investigation. What factors may have caused inaccurate conclusions or caused errors. How could the experiment be changed or added to in order to understand more about the ideas being examined. What would make it better?

Science Lab: pH Results

Date: June 7th, 2018

1. Sodium bicarbonate (base)
2. Acetic Acid
3. citric Acid
4. Magnesium Hydroxide (base)
5. Dilute Sulphuric Acid
6. Sodium Hydroxide (base)

TRIAL 1





Group	Weakest < ----->Strongest			Weakest < ----->Strongest		
	Acids			Bases		
Cooper	2	3	5	6	4	1
Casey	2	3	5	4	1	6
	2	3	5	4	1	6
David	2	3	5	1	6	4
Sophia	2	3	5	4	6	1
Caden	3	2	5	4	6	1
Lawrence	2	3	5	1	4	6
May	2	3	5	4	1	6
Ray	2	3	5	1	4	6
Eason	2	5	3	4	6	1
Matt	2	3	5	4	1	6
Camila	2	3	5	4	6	1
Eknoor	2	3	5	4	6	1
Cynthia	2	3	5	1	4	6
Eknoor	2	3	5	1	4	6

TRIAL 2

Lawrence	2	3	5	4	6	1
Eknoor	2	3	5	6	4	1
Caden	3	2	5	4	6	1
Andrew	2	3	5	6	4	1
Veer	2	3	5	6	4	1
Cynthia	3	2	5	6	4	1

EXAMPLE FOR LAB

Testing Acid 1 (citric acid) with Base 2 (sodium bicarbonate)

<p>20 drops of Acid 1 with 5 drops of pH indicating solution</p>		
<p>Acid 1 with 15 drops of Base 2</p> <p>Observations: as you can see the acid is changing colour and becoming more purplish</p>		
<p>Acid 1 with 25 drops of Base 2</p> <p>Observations: as you can see the acid is changing colour and becoming more purplish with a little green on the top where the base was added</p>		
<p>Acid 1 with 30 drops of Base 2</p> <p>Observations: as you can see acid 1 is now green indicating that is now a base</p>		
<p>Conclusion: It took 30 drops of Base 2 to turn Acid 1 into a base</p>		

