

Procedure

- Label the test tubes with numbers 1-9
- Mix the following chemicals in separate test tubes
 1. Baking soda and vinegar
 2. Magnesium heated in a flame
 3. Iron sulphate and copper
 4. Potassium iodide and lead (II) nitrate
 5. Zinc with Hydrochloric acid
 6. Sodium hydroxide and Hydrochloric acid
 7. Heat some ice
 8. Heat a small piece of lead until melt it
 9. Dissolve water and salt
- Test with the red and blue litmus paper the baking soda
- Test with the red and blue litmus paper the vinegar
- Test with the red and blue litmus paper the products of the reaction on test tube 1
- Test with the red and blue litmus paper the hydrochloric acid
- Test with the red and blue litmus paper the sodium hydroxide
- Test with the red and blue litmus paper the products of the reaction on test tube 6.
- Write down all observation

Data Table 1

Describe the appearance of the reactants

Compound	State of matter	Color
Hydrochloric acid		
Zinc		
Baking soda		
Acetic acid		
Magnesium		
Salt		
Copper		
Potassium iodide		
Lead (II) nitrate		
Distilled water		
Lead		
Sodium hydroxide		
Ice		

Data Table 2

Write the observations and classify them as chemical or physical change.

Test tube	Reactions	Observations (bubbles, change of temperature, change of color, solid formation)	Type of change
1.	Baking soda and vinegar		
2.	Magnesium heated in a flame		
3.	Iron sulphate and copper		
4.	Potassium iodide and lead (II) nitrate		
5.	Zinc with Hydrochloric acid		
6.	Sodium hydroxide and Hydrochloric acid		
7.	Heat some ice		
8.	Heat a small piece of lead until melt it		
9.	Dissolve water and salt		

Data Table 3

Register any color change in the litmus paper

Test	Compound	Red litmus paper	Blue litmus paper
1	Baking soda		
2	Vinegar		
3	Test tube 1		
4	Hydrochloric acid		
5	Sodium hydroxide		
6	Test tube 2		

Data Analysis and conclusions

1. Did you find any difference in the properties of reactants and products? If yes in which cases?
2. With the information from Data Table 3, What can you conclude?

3. Find out the formula of each compound and elements used during this lab practice.

Name	Formula
Hydrochloric acid	
Zinc	
Baking soda	
Acetic acid	
Magnesium	
Salt	
Cooper	
Potassium iodide	
Lead (II) nitrate	
Distillated water	
Lead	
Sodium hydroxide	
Ice	