

Oxidation reduction lab and physical essay



**ASSIGN
BUSTER**

College Chemistry 1 Lab 16 Oxidation Reduction Lab 16 Introduction: I will learn about redo reactions. Materials and Methods: I placed ten drops of each substance into different wells.

Then I took Magnesium and put it in the first one. I put Zinc into the second one. I placed lead into the third and fourth one, and put iron into the fifth one. Results: See Table Below.

Discussion: I learned about different redo reactions. Questions: A. Sodium, Magnesium, Zinc, Iron, Lead and Copper. In descending order.

B. Before Copper in descending order. C.

If a reaction takes place then the metal displaces the original metal. 1. 0 7.

And 8. Iron is the reducing agent so it is oxidized and Nickel is the oxidized agent so it is reduced. Table: Substances Observations Magnesium and Sodium Sulfate Bubbles Zinc and Magnesium Sulfate No reaction Lead and Zinc Nitrate Lead and Iron (III) Chloride Lead oxidized Iron and Copper (II) Sulfate Iron turns pink Unit 2 Lab 2 Chemical and Physical Properties Chemical and Physical Properties I will figure out different chemical and physical properties of various chemical absences.

I filled four different test tubes with a little bit of Magnesium. The first one I recorded the color and odor.

Then I heated it and recorded any changes. I added water to the second one and tried to decipher the solubility. Then I heated it to find out how it dissolved in hot water. Then I tested the water with red and blue litmus

paper and recorded my findings. I put a couple of drops of HCl into the third test tube and then stirred it.

I added a couple of drops of Noah to the fourth test tube and then stirred it, recording any and all results.

See table and questions below. This lab was a great introduction to identifying different chemical and physical properties and on how to tell the difference. The methods used should come in handy when it comes time to be able to identify substances in the future.

Substance	Name	Color	Odor	Effect of Heat	Cold H ₂ O	Hot H ₂ O	Litmus Test
Dilute HCl	Dilute Noah	MGM	Silver	None	None	None	None
Bubbling	none	Cue	Gold	None	None	None	None
Silver	None	None	None	None	Basic	Bubbling	None
None	None	Basic	Bubbling	None	MGM	White	None
None	None	Basic	Bubbling	None			

Chuck Green None Black None None No reaction Bright green and bubbling
 Bluish green Cue(NON)₂ Blue None None Dissolves None Acidic Green None
 NCAA Whitening None Clear Dissolves No reaction None None A. Yes B. I
 decided that when adding another chemical and having it bubble would have
 to be a sign of a chemical reaction. Another would be a significant color
 change.

I believe that the most important sign that something has gone through a
 chemical change is that it cannot be easily reversed. C. When I added HCl to
 MGM, Zen, MGM, and Chuck they all bubbled, which would be a sign of a
 chemical reaction.

Another one is when $\text{Cu}(\text{NO}_3)_2$ changed from blue to green, which is another sign of a chemical reaction.

1. Physical D. 2. Chemical 3. Physical 4.

Chemical E. 1. Physical 4. Physical 5. Physical 6.

Chemical F. Dissolving table salt allows the substance to become a mixture of salt and water. I would evaporate the water and prove that salt can return to its original form. Because salt can return to its original form and it does not become another substance that proves that dissolving salt is merely a physical change.