

Chemical reaction and general college chemistry



**ASSIGN
BUSTER**

Phenolphthalein is another acid-base indicator.

What color do you observe? (General College Chemistry, 2014, up. 17-18). G. HCl and phenolphthalein. What color do you observe? When reacting phenolphthalein with an acid what color change do you expect? What color change do you expect with a base? (General College Chemistry, 2014, up. 17-18).

H. Noah and Again (silver nitrate) (General College Chemistry, 2014, up. 17-18). L. Again and NH (ammonia). Absorb this mixture onto a scrap of paper towel and expose it to intense light from a light bulb or the sun.

Be patient and you will observe a change.

Record your observation (General College Chemistry, 2014, up. 17-18). J.

NH and Cuscus (copper (II) sulfate) (General College Chemistry, 2014, up. 17-18). Data Table/Observations: Data Table 1: Reactions Expected Well #/Question Chemicals Reaction A: AY Enhance and HCl-CA Bubble formed in a clear liquid HCl and BIT Red-orange color formed NH and BIT Blue: When reacting with an acid, the color should range from red to yellow. When reacting with a base, the color should range from a dark green to blue too purple.

D: GIG HCl and blue dye Dark Green Blue dye and NAACP Aqua blue.

When HCl was added it turned black and then grey. F: CA SKI and BP (NON)2 Thick yellow color; white/yellow precipitate. Noah and phenolphthalein Purple/Dark Fuchsia H: 63 HCl and phenolphthalein White: For acid reaction, I

would expect to see a range from colorless to orange. For a base reaction, I would expect to see a Fuchsia to colorless reaction. L: AY Noah and Again Brown Again and NH Turned red then started turning black NH and CUSCUS Light blue Results/Analysis/Questions: A Suppose a household product label says it contains sodium hydrogen carbonate sodium bicarbonate).

How would you test this material for the presence of sodium bicarbonate? A. I would test the product using a very similar test to part A of the experiment. I would take a small amount of the household cleaning product and HCl (hydrochloric acid) to check for the presence of bubbles indicating carbon dioxide. B.

You know what color phenolphthalein and brotherly blue turn when testing an acid or a base. Use the empty pipette in the Auxiliary Supplies Bag to test several (at least 3) household items including household cleaning products with brotherly lee.

Rinse the pipette well before using it on the next household chemical. When finished with this experiment rinse the pipette well and return it to the Auxiliary Bag for use in future experiments. Name the items tested and record their results. What do these results mean? A.

Winded- antibacterial Orange-yellow b. Lime-a-way Yellow c. Dawn dish soap Started Blue but slowly changed to green The Winded and the Lime-a-way are both acids. And the Dawn dish soap is a base that is more on the neutral side. These results are what I had expected the products to be.

Dawn dish soap is mild and used everyday on bare hand with no injury to hand. The Winded and Lime-a-way are much stronger chemicals and are very hard on skin. C. You found a sample of a solution that has a faint odor resembling vinegar.

You are verifying that it is indeed vinegar and you add a few drops of phenolphthalein. The sample turns pink. What assumption can you make about this sample? A. Phenolphthalein turns pink when mixed with a base. Since vinegar is an acid, the presents of a pink reaction would indicate that this solution is not vinegar. D.

You decided to investigate if the new wave of Vitamin Water is pH neutral: neither too acidic nor too basic. Using BIT (brotherly blue), you select five flavors of Vitamin Water to test. Three of the flavor-samples turn a murky green, indicating the likelihood of acid/base balance. Of the two remaining, one turns slightly yellow, while one remains blue. What can you assume about the acid/base content of these particular flavors of Vitamin Water? A. The flavor of Vitamin water that turns yellow is acid and the flavor that remains blue is basic based on their color changes.

E. You have read that a new brand of hair tonic is supposed to contain lead (an ingredient in Grecian Formula). Devise a simple test to confirm the presence or absence of lead in that hair tonic. A.

I would use a similar experiment that was done in mixture F. I would start by taking a small amount of hair tonic and mix it with potassium I iodine and observe the reaction. It the reaction is similar to that to the experiment, it

would indicate the presents of lead in the hair tonic. If a different reaction occurs, it would indicate the absence of lead.