

## Evidence of chemical changes lab: (write in lab binder/journal)

Objective: Recognize the 4 signs that a chemical change might have occurred

Procedure: Write observations in a data table upon completion of the four stations

station #	observations (description of senses) (ex. bubbles formed or felt hot .....)	evidence (one of the four signs that a chemical change might have occurred)

Station 1:

1. add 1 piece of Mg to 4 ml of .5M HCl in a test tube
2. **Immediately** cover the test tube with a cork or your thumb
3. When reaction is near completion, about 1 1/2 minutes, place a lit wood splint into the gas section of the test tube **immediately** following the uncorking of the test tube and record observations

Station 2:

1. Add 3 drops of KI to 1 cm of  $\text{Pb}(\text{NO}_3)_2$  in a test tube
2. Make immediate observations as well as observations about 2-5 min. of test tube being undisturbed

Station 3:

1. Add one drop of phenolphthalein to a basic solution and make observations

Station 4:

1. You must do the entire experiment under the hood
2. Place about \_\_\_\_\_g of sugar in a 50ml beaker
3. **Carefully**, (be sure to have on chemical resistant gloves) pour about \_\_\_\_\_ ml of concentrated sulfuric acid into the beaker with the sugar and make observations.
4. To clean, when beaker is cool remove contents carefully and discard in the trash. Pour a small amount of acetone to rinse off any residue left over and then clean with soap and water.

Questions:

1. What are the four signs that a chemical change might have occurred?
2. Does the presence of one of these signs always indicate a chemical change?
3. Besides bubbles, what is another observation that suggests a gas is produced?
4. Besides light production, what are other observations that suggest energy absorption or release?