



CP CHEMISTRY
OBSERVING AND WRITING CHEMICAL REACTIONS

Carry out each of the following mini-experiments. Record your observations. What indicates that a chemical reaction has occurred? Write a balanced chemical equation to represent what occurred in each experiment. Remember that in a chemical reaction, bonds are being broken and reformed. Make sure that your equation shows this. If a gas is given off, you are expected to experimentally determine the identity of that gas.

- Expt. #1 - Pour 10 mL of H_2O_2 solution into a test tube. Add a pinch of manganese dioxide.
- Expt. #2 - Place a piece of zinc in a test tube. Add a small amount of copper(II) sulfate solution.
- Expt. #3 - Place a piece of copper wire in a high temperature burner flame for 30 seconds. Remove the wire from the flame and observe. (Copper(I) oxide is red and copper(II) oxide is black).
- Expt. #4 - Add a small amount of lead nitrate solution to a test tube. Add an equal amount of ~~sodium~~
potassium iodide solution.
- Expt. #5 - Add a pea-size sample of sodium chloride to a test tube. Add a small amount of water to dissolve the salt. (No reaction up to this point). Add an equal amount of silver nitrate solution.
- Expt. #6 - Place a small piece of zinc in a test tube. Add enough 6M HCl to cover the zinc.
- Expt. #7 - Scrape the edges of a penny with a file. Place the penny in a small beaker and cover it with 6M HCl. Observe now and after 24 hrs.
- Expt. #8 - Add about 5 mL of AgNO_3 to a test tube. Place a coiled piece of copper wire in the test tube and let sit undisturbed.

