Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Carry out each of the reactions below. Observe the reactants carefully before and after mixing to determine if a reaction has taken place. If so, **record the evidence of a reaction** observed. Not every combination will result in a chemical reaction. If **no reaction** occurs, **determine the reason why**. Write a balanced chemical equation for each reaction and **classify each** with respect to reaction type. After the reaction is complete, RINSE glassware with DEIONIZED WATER and DISPOSE OF ALL WASTES in the appropriate waste container.

|  |  |
| --- | --- |
| 1. **Rxn Type**
 | **Add 10 ml of AgNO3 to a test tube. Carefully place a piece of twisted copper (II) into the tube with a small portion visible above the liquid. Take test tube with you to station #3.** |
| **How do you know?** |  **\_\_\_\_\_\_AgNO3 +\_\_\_\_\_\_Cu 🡪**  |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Observe the of cobalt (III) chloride (CoCl3) in the electrolysis apparatus.** |
|  |  **\_\_\_\_\_\_** **CoCl3 🡪** |
| **How do you know?** | **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Obtain 10 ml of KOH and 10 ml of CuSO4 in 2 separate beakers. Pour one solution into the other. Pour waste into the container and rinse glassware with deionized water. Make observations of Test Tube 1 and 2, then leave in the test tube racks at this station.** |
| **How do you know?** |  **\_\_\_\_\_\_CuSO4 +\_\_\_\_\_\_KOH 🡪** |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Obtain 10 ml of HCl in a test tube. Carefully place a FEW pieces of solid copper into the tube. Pour waste into the waste container and rinse.** |
| **How do you know?** |  **\_\_\_\_\_\_HCl + \_\_\_\_\_\_Cu 🡪**  |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Obtain 2 ml of isopropyl alcohol (C3H7OH). Make sure the lab area is clear of all papers and pour the liquid on the counter. Ignite the isopropyl alcohol with a match. Dispose of match in the trash.** |
| **How do you know?** |  **\_\_\_\_\_\_C3H8O + \_\_\_\_\_\_O2 🡪** |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Add 8ml of 0.1 M HCl to a test tube. Carefully place a small amount of solid Mg into the tube. Pour waste into the container.** |
| **How do you know?** |  **\_\_\_\_\_\_**HCl +**\_\_\_\_\_\_** Mg 🡪  |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Obtain 10 ml of NaOH and 10 ml of KCl in 2 separate beakers. Pour one solution into the other. Pour waste into the container and rinse glassware with deionized water.** |
| **How do you know?** |  **\_\_\_\_\_\_NaOH + \_\_\_\_\_\_KCl 🡪**  |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Obtain 10 mL of hydrogen peroxide (H2O2) and pour it carefully into the Erlenmeyer flask. Carefully place a “tea bag” into the flask. *HINT: one of the products is H2O.*  Pour waste into the container and rinse the flask with water.** |
| **How do you know?** |  **\_\_\_\_\_\_H2O2 🡪** |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Obtain 10 ml of sulfuric acid (H2SO4) and 10 ml of Ba(NO3)2 in 2 separate beakers. Pour one solution into the other. Pour waste into the container and rinse glassware with deionized water.** |
| **How do you know?** |  **\_\_\_\_\_\_H2SO4 + \_\_\_\_\_\_Ba(NO3)2 🡪** |
| **Evidence of reaction? No reaction? Why?** |
| 1. **Rxn Type**
 | **Ignite a strip of magnesium ribbon by holding it CAREFULLY with metal tongs over a burner flame. Do not look directly at the flame. Place waste in the trash.** |
| **How do you know?** |  **\_\_\_\_\_\_Mg + \_\_\_\_\_\_O2 🡪**  |
| **Evidence of reaction? No reaction? Why?** |