**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Partners: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Precipitation Lab**

**Purpose:**

* to determine whether a chemical reaction results in a precipitate (PPT)

**Materials:**

* dropper bottles of various solutions
* plastic sheet

**Method:**

* in groups of 3--**General** kids make sure you have an **Applied** kid in your group
* goggles at all times!!
* dropper bottles will be at the 4 corners of the room
* place one of your group's lab data tables under the plastic
* dropper bottles are to be used to **DROP** solutions onto the plastic sheet
* there is **NO TOUCHING** of the tips of the droppers--no cross contamination of solutions!! Remember--touching is bad!!
* drop the solutions 1 at a time onto the plastic sheet
* indicate on your other 2 lab data tables if a precipitate formed by marking **"R"** or **"--"**

**Observations:**

* fill in "data table" on the back of this sheet with an R or a negative sign

**Processing of Data:**

* for **each PPT reaction** that took place write the **BCE** using proper **subscripts**
* indicate which product is the PPT by referring to the solubility chart--**Applied** kid is to explain how this works to the **General** kids

e.g. **NaCrO4(aq) + Cu(NO3)2(aq) →** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Data Table**

Mark **"R"** where a precipitation reaction took place.

Mark **"--"** if no reaction.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Solutions** | **Potassium chromate** | **Copper (II) sulfate** | **Barium hydroxide** | **Lead (II) nitrate** | **Sodium carbonate** | **Potassium chloride** | **Ammonium chloride** | **Silver nitrate** |
| **Potassium chromate** | **X** |  |  |  |  |  |  |  |
| **Copper (II) sulfate** |  | **X** |  |  |  |  |  |
| **Barium hydroxide** |  |  | **X** |  |  |  |
| **Lead (II) nitrate** |  |  |  | **X** |  |
| **Sodium carbonate** |  |  |  |  |
| **Potassium chloride** |  |  |  |
| **Ammonium chloride** |  |  |
| **Silver nitrate** |  |