**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_**

**Salts & Ionic Compounds Lab**

**Objective:**

1. To write chemical names and formulas of common chemical compounds
2. Describe the colors and textures of common ionic compounds

**Procedure:**

* Observe the solid compounds listed below either by name or formula. Record the colors of the crystals and textures of the crystals (powder, lumps, crystals) in the Data Table Below. If the name is given, write the formula. If the formula is given, write the name.

**Data Table:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Station 1** | **Name** | **Potassium Bromide** | **Sodium**  **Chloride** | **Potassium Iodide** |
|  | **Color & Texture** |  |  |  |
|  | **Formula** |  |  |  |
| **Station 2** | **Name** | **Calcium Hydroxide** | **Sodium**  **Carbonate** | **Ammonium Chloride** |
|  | **Color & Texture** |  |  |  |
|  | **Formula** |  |  |  |
| **Station 3** | **Name** | **Sodium**  **Acetate** | **Sodium Phosphate** | **Magnesium Sulfate** |
|  | **Color & Texture** |  |  |  |
|  | **Formula** |  |  |  |
| **Station 4** | **Name** | **Lead (II)**  **Nitrate** | **Tin (IV)**  **Chloride** | **Copper (II) Sulfate** |
|  | **Color & Texture** |  |  |  |
|  | **Formula** |  |  |  |
| **Station 5** | **Formula** | **Iron (III) Oxide** | **Nickel (II) Sulfate** | **Copper (II) Oxide** |
|  | **Color & Texture** |  |  |  |
|  | **Name** |  |  |  |
| **Station 6** | **Formula** | **CoCl2** | **K2(Cr2O7)** | **Ag(NO3)** |
|  | **Color & Texture** |  |  |  |
|  | **Name** |  |  |  |
| **Station 7** | **Formula** | **FeCl3** | **NiCl2** | **Mn(SO4)** |
|  | **Color & Texture** |  |  |  |
|  | **Name** |  |  |  |

1. **When writing ionic compounds, is the cation always the metal or the non-metal?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Give three different cations that were used in today’s lab.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **When writing ionic compounds, is the anion always the metal or non-metal?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. **Give three different anions that were used in today’s lab.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. **In your own words, describe how to name an ionic compound.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. **When should you use Roman numerals in naming compounds?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. **In your own words, describe how to write a formula for an ionic compound.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_