**Unit 2: Chemical Reactions Station Review**

**Station #1**

Name the Following:

1. NH3 d) AlBr3
2. P4S10 e) K2S
3. S2O7

Write the formula: f) cupric oxide

**Station #2**

Complete the following name/formula

1. potassium chlorate d) Fe(BrO3)2
2. tin (IV) hypochlorite e) NaHCO3
3. sodium phosphite f) aluminum hydrogen phosphate

**Station #3**

Write names/formulas

1. CuSO4·5H2O d) HNO4(aq)
2. HF(aq) e) H2CO3(aq)
3. hydrosulfuric acid f) sulfuric acid

**Station #4**

Complete the following chart:

|  |  |  |
| --- | --- | --- |
| Oxy Anion Name | Oxygen Content | Acid Name |
|  | one more |  |
|  | normal |  |
|  | one less |  |
|  | two less |  |

How do you name binary acids?

**Station #5**

Balance the following equations:

1. CaO + C 🡪 CaC2 + CO
2. Na2CO3 + H3PO4 🡪 Na3PO4 + H2O + CO2
3. Name the 5 types of reactions and give general equations

**Station #6**

Complete the following reactions

With excess oxygen

1. CH4(g) + O2(g) 🡪

With insufficient oxygen

1. CH4(g) + O2(g) 🡪
2. If you were to look at a flame, how could you tell if it is complete combustion?
3. What evidence would lead you to believe you have incomplete combustion?

**Station #7**

Complete the following table/reactions

1. Metal carbonates 🡪
2. Carbonic acid 🡪
3. Metal nitrate 🡪
4. Metal hydroxide 🡪
5. What type of reactions are these?

**Station #8**

Magnesium is burnt in oxygen to produce X. X is then reacted with water.

1. Write out both balanced chemical reactions
2. Repeat the same for the element carbon.
3. Describe the difference between the reaction of non-metal oxides + water and metal oxides + water

**Station #9**

What is the activity series? How does it work?

What is the halogen series? How does it work?

Complete

1. Cu(s) + MgSO4(aq) 🡪
2. I2(s) + NaCl(aq) 🡪
3. Mg(s) + HCl(aq) 🡪

**Station #10**

Are the following aq or s in water?

1. NaCl e)NaNO3
2. Na2SO4 f) AgCl
3. Ag2SO4 g) BaSO4
4. CaCO3

**Station #11**

Complete the following:

1. Cu(NO3)2(aq) + MgCl(aq) 🡪
2. Ba(OH)2(aq) + Fe2(SO4)3(aq) 🡪
3. Mg(OH)2(S) + H2SO4(aq) 🡪