**GPS – Chemical reactions practice quiz**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

Using your resources, answer the following questions.

1. What is the definition of a chemical reaction?
2. What is a precipitate? Be specific.
3. What are two ways to determine if a chemical reaction is taking place?
4. What is the word for the *original substances* in a chemical equation?
5. What is the word for the *produced substances* in a chemical equation?
6. What is the difference between a synthesis reaction and a decomposition reaction?
7. What is the difference between a single-displacement reaction and a double-displacement reaction?
8. Describe how to write the formula of a covalent compound.
9. What does the Law of Conservation of Mass say?
10. What is a chemical formula?

Identify the type of reactions shown in the chemical equations. Your choices are **synthesis (S)**, **decomposition (D)**, **single-displacement (SR)**, **double-displacement (DR)**, and **combustion (C)**.

1. KClO3    KCl  +  O2                                     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. KBr + F2  KF + Br2                                     \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. S8 + F2  SF6                                                \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Na2SO4 + Pb(NO3)2  NaNO3 + PbSO4       \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. C3H8 + O2  CO2 + H2O                                \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Zn + HCl  ZnCl2 + H2                                 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. FeCl3 + Na2CO3  Fe2(CO3)3 + NaCl            \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Na + H2O  NaOH + H2                             \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. C2H6 + O2  CO2 + H2O                             \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. HgO  Hg + O2                                             \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. CaCl2 + Na3PO4  NaCl + Ca3(PO4)2            \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. N2O5 + H2O   HNO3                                   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Mg + CuCl2  MgCl2 + Cu                       \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_


Using the prefixes and example problem below, name the following covalent compounds. For the names, give the chemical formula.

1. Name SO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Name CO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Name N2O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Name CO2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Name N3Cl4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Formula for sulfur hexafluoride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Formula for phosphorus pentabromide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Using the example problem below, name the following ionic compounds.
8. Name MgCl2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Name LiBr\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Name K2O\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Name NaCl\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Name CaF2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_