**Chemistry A Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Period\_\_\_\_\_\_**

**Balancing Chemical Equations**

*Balance the equations below:*

1) \_\_\_\_ N2 + \_\_\_\_ H2 🡪 \_\_\_\_ NH3

2) \_\_\_\_ KClO3 🡪 \_\_\_\_ KCl + \_\_\_\_ O2

3) \_\_\_\_ NaCl + \_\_\_\_ F2 🡪 \_\_\_\_ NaF + \_\_\_\_ Cl2

4) \_\_\_\_ H2 + \_\_\_\_ O2 🡪 \_\_\_\_ H2O

5) \_\_\_\_ Pb(OH)2 + \_\_\_\_ HCl 🡪 \_\_\_\_ H2O + \_\_\_\_ PbCl2

6) \_\_\_\_ AlBr3 + \_\_\_\_ K2SO4 🡪 \_\_\_\_ KBr + \_\_\_\_ Al2(SO4)3

7) \_\_\_\_ CH4 + \_\_\_\_ O2 🡪 \_\_\_\_ CO2 + \_\_\_\_ H2O

8) \_\_\_\_ C3H8 + \_\_\_\_ O2 🡪 \_\_\_\_ CO2 + \_\_\_\_ H2O

9) \_\_\_\_ C8H18 + \_\_\_\_ O2 🡪 \_\_\_\_ CO2 + \_\_\_\_ H2O

10) \_\_\_\_ FeCl3 + \_\_\_\_ NaOH 🡪 \_\_\_\_ Fe(OH)3 + \_\_\_\_NaCl

11) \_\_\_\_ P + \_\_\_\_O2 🡪 \_\_\_\_P2O5

12) \_\_\_\_ Na + \_\_\_\_ H2O 🡪 \_\_\_\_ NaOH + ­­­\_\_\_\_H2

13) \_\_\_\_ Ag2O 🡪 \_\_\_\_ Ag + \_\_\_\_O2

14) \_\_\_\_ S8­ + \_\_\_\_O2 🡪 \_\_\_\_ SO3

15) \_\_\_\_ CO2 + \_\_\_\_ H2O 🡪 \_\_\_\_ C6H12O6 + \_\_\_\_O2

16) \_\_\_\_ K + \_\_\_\_ MgBr 🡪 \_\_\_\_ KBr + \_\_\_\_ Mg

17) \_\_\_\_ HCl + \_\_\_\_ CaCO3 🡪 \_\_\_\_ CaCl2 + \_\_\_\_H2O + \_\_\_\_ CO2

18) \_\_\_\_ HNO3 + \_\_\_\_ NaHCO3 🡪 \_\_\_\_ NaNO3 + \_\_\_\_ H2O + \_\_\_\_ CO2

19) \_\_\_\_ H2O + \_\_\_\_ O2 🡪 \_\_\_\_ H2O2

20) \_\_\_\_ NaBr + \_\_\_\_ CaF2 🡪 \_\_\_\_ NaF + \_\_\_\_ CaBr2

21) \_\_\_\_ H2SO4 + \_\_\_\_ NaNO2 🡪 \_\_\_\_ HNO2 + \_\_\_\_ Na2SO­4

**Practice Problems**

Write the correct formulas and balance the equation for each of the following:

1. sodium hydroxide http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpgsodium oxide + water
2. Iron + oxygen http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpgiron (III) oxide
3. carbon dioxide + water http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpgglucose + oxygen
4. iron (II) sulfide + hydrochloric acid http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpgiron (II) chloride + hydrogen sulfide
5. oxygen + hydrogen http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpg Water
6. chlorine + sodium iodide http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpg Iodine + sodium chloride
7. aluminum nitrate + sulfuric acid http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpg aluminum sulfate
8. silver oxide http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpg silver + oxygen
9. ammonium phosphate + barium hydroxide http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpg ammonium hydroxide + barium phosphate
10. calcium hydroxide + hydrochloric acid http://www.howe.k12.ok.us/~jimaskew/chem/arrow.jpg calcium chloride + water