**Balancing Chemical Equations Worksheet**

Complete the following on a separate sheet of paper

Balance the following skeleton equations.

1. H2 + F2 -> HF
2. Sn + O2 -> SnO
3. MgCl2 -> Mg + Cl
4. KNO3 -> KNO2 + O2
5. Li + H2O -> LiOH + H2
6. C9H6O4 + O2 -> CO2 + H2O
7. Al + H2SO4 -> H2 + Al2(SO4)3
8. FeCl3 + Ca(OH)2 -> Fe(OH)3 + CaCl2
9. Pb(NO3)2 + K2CrO4 -> PbCrO4 +KNO3
10. Ca(OH)2 + NH4Cl -> NH3 + CaCl2 + H2O

Write the skeleton for each of the following reactions. Then balance each of the following chemical equations.

1. hydrogen + oxygen -> water
2. iron (III) oxide + hydrogen -> water + iron
3. sodium + water -> sodium hydroxide + hydrogen
4. chromium + Tin (IV) chloride -> chromium (III) chloride + tin
5. magnesium + copper (II) sulphate -> magnesium sulphate + copper
6. zinc sulphate + strontium chloride -> zinc chloride + strontium sulphate
7. ammonium chloride + lead (III) nitrate -> ammonium nitrate + lead (III) chloride
8. iron (III) nitrate + magnesium sulphide -> iron (III) sulphide + magnesium nitrate
9. aluminum chloride + sodium carbonate -> aluminum carbonate + sodium chloride
10. sodium phosphate + calcium hydroxide -> sodium hydroxide + calcium phosphate

Rewrite the following sentences as chemical work equations. Then write the skeleton equation and balance the equation.

1. iron combines with oxygen to form iron (II) oxide
2. A solution of hydrogen chloride reacts with sodium carbonate to produce carbon dioxide, sodium chloride, and water.
3. When aluminum metal is exposed to oxygen, a metal oxide called aluminum oxide is formed.
4. water reacts with sodium oxide to produce a solution of sodium hydroxide.
5. Hydrogen gas reacts with nitrogen trifluoride to form nitrogen has n hydrogen fluoride.
6. Chromium (III) sulphate reacts with potassium carbonate to form chromium (III) carbonate and potassium sulphate