Name: _____ Date: _____

Types of Chemical Reactions (Part II): Single and Double Displacement

For each of the chemical reactions listed below, complete the following:

- The type of chemical reaction (single or double displacement)
- Balance the skeletal equation

1. Sulphuric acid reacts with iron (II) sulphide to produce iron (II) sulphate and hydrogen sulphide.

   - Reaction type: _____
   - Balance the skeletal equation: ____H_2SO_4 +_____FeS -->_____$FeSO_4$ + _____H_2S

2. An alkali metal such as sodium displaces hydrogen from water to form sodium hydroxide and hydrogen gas.

   - Reaction type: _____
   - Balance the skeletal equation:__Na + ____H_2O -->_____NaOH + _____H_2

3. Valuable silver can be recovered from a solution of silver nitrate by adding copper to produce copper (II) nitrate and a silver precipitate.

   - Reaction type: _____
   - Balance the skeletal equation: ____$AgNO_3$ + ____Cu --> _____$Cu(NO_3)_2$ + _____ Ag

4. If we were to add table salt to a solution of silver nitrate we would produce sodium nitrate solution and silver chloride.

   - Reaction type: _____
   - Balance the skeletal equation:____NaCl + ____$AgNO_3$ -->_____$NaNO_3$ + ____AgCl

5. Potassium iodide reacts with lead (II) sulphate to produce potassium sulphate and lead (II) iodide.

   - Reaction type: _____
   - Balance the skeletal equation: __ KI + ____ $PbSO_4$ -->_____K_2SO_4 + _____PbI_2