DESCRIPTIVE CHEMISTRY PRACTICE (turning worded statements into chemical equations)

- 1. Mercury and bromine will react with each other to produce mercury (II) bromide.
- 2. Magnesium and Iodine will react with each other to produce magnesium iodide.
- 3. The reaction takes place when two reagents are combined, solid iron(III)oxide and aluminum metal. The products of this reaction are liquid (molten) iron and aluminum oxide.
- 4. The reaction between solid potassium chlorate and solid red phosphorus (P_4) takes place when you strike a match on a matchbox. The products of this reaction are the solids, tetraphosphorus decoxide and potassium chloride.
- 5. Solutions of sodium carbonate and silver nitrate react to form solid silver carbonate and a solution of sodium nitrate.
- 6. Solutions of sulfuric acid and lead(II)acetate react to form solid lead(II)sulfate and a solution of acetic acid.

Answers:

1.
$$\operatorname{Hg}(1) + \operatorname{Br}_{2}(1) \rightarrow \operatorname{HgBr}_{2}(s)$$

2.
$$Mg(s) + I_2(s) \rightarrow MgI_2(s)$$

3.
$$Fe_2O_3(s) + 2 Al(s) \rightarrow Al_2O_3(s) + 2 Fe(l)$$

4.
$$10 \text{ KClO}_3(s) + 3P_4(s) \rightarrow 3 P_4O_{10}(s) + 10 \text{ KCl}(s)$$

5.
$$Na_2CO_3(aq) + 2 AgNO_3(aq) \rightarrow Ag_2CO_3(s) + 2 NaNO_3(aq)$$

6.
$$H_2SO_4$$
 (aq) + $Pb(CH_3COO)_2$ (aq) $\rightarrow PbSO_4$ (s) + 2 CH_3COOH (aq)