Chapter 4 Practice Test

*****Here is more practice to help you get ready for the midterm. You will have questions over moles, empirical and molecular formulas, percent composition, parts of the atom, famous people and ect…**

Directions:

a) Write the net ionic equation for each reaction below, #1-6. Balance the ionic charge.
b) Classify each reaction type for the original reaction.

1. Solid lithium oxide is added to water.

Net Ionic equation: _____

Type: _____

2. **Hydrogen sulfide gas is bubbled through potassium hydroxide solution.**

Net Ionic equation: _____

Type: _____

3. **Ethane, C_2H_6, is combusted in air. Balance the net ionic equation in terms of atoms.**

Net Ionic equation: _____

Type: _____

4. **Potassium metal is strongly heated in nitrogen gas.**

Net Ionic equation: _____

Type: _____

5. Metallic sodium pellets are added to water.

Net Ionic equation: _____

Type: _____

6. A solution of ethanoic acid is added to a solution of barium hydroxide.

Net Ionic equation: _____

Type: _____

7. Given the basic reaction $Al + MnO_4^- \rightarrow MnO_2 + Al(OH)_4^-$. **Show the two half reactions, identify the oxidizing and reducing agent and show the overall balanced Redox reaction.**

Oxidized ½ rxn: _____

Reduced ½ rxn: _____

Oxidizing agent: _____ Reducing Agent: _____

Balanced Redox Reaction: _____

8. Given the acidic reaction $Cu(s) + NO_3^-(aq) \rightarrow Cu^{2+}(aq) + NO(g)$. **Show the two half reactions, identify the oxidizing and reducing agent and show the overall balanced Redox reaction.**

Oxidized ½ rxn: _____

Reduced ½ rxn: _____

Oxidizing agent: _____ Reducing Agent: _____

Balanced Redox Reaction: _____