SNC2DTypes of Chemical Reactions and Balancing WorksheetMs. Kueh

Part 1: Balance the following reactions and indicate the reaction type represented (remember your choices are: synthesis, decomposition, single displacement, double displacement).

1. ____ NaBr + ____ Ca(OH)₂ \rightarrow ____ CaBr₂ + ____ NaOH

Word Equation:

Туре: _____

2. ____NH₃ + ____ H₂SO_{4 (aq)} \rightarrow ____ (NH₄)₂SO₄

Word Equation:

Туре: _____

3. ____C₅H₉O + ____O_{2 (g)} \rightarrow ____CO₂ + ____H₂O *challenge

Word Equation:

4-hydroxy-2-methylenebutyl +

Туре: _____

4. ____ Pb + ____ H₃PO₄ (aq) \rightarrow ____ H₂ + ___Pb₃(PO₄)₂

Word Equation:

5. ____NaOH \rightarrow ____Na + ____O₂ + ____H₂

Word Equation:

Туре: _____

6. ____ Li₃N + ____ NH₄NO₃ \rightarrow ____ LiNO₃ + ____ (NH₄)₃N

Word Equation:

Туре: _____

7. ____ HBr + ____ Al(OH)_3 \rightarrow ____ H₂O + ____ AlBr₃

Word Equation:

Туре: _____

8. _____Li + _____N₂ \rightarrow _____Li₃N

Word Equation:

Туре: _____

Part 2 – Word Equations to Balanced Chemical Equations

- Identify thet type of reaction.
- Write the **skeleton** equation
- Balance the equation
 - 1. Water added to calcium oxide forms calcium hydroxide in a synthesis reaction.

2. Iron reacting with sulfur to produce iron (II) sulfide.

3. Lead reacting with oxygen produces lead (II) oxide.

4. The reaction of copper (II) oxide with hydrogen to form copper metal and water.

5. The reaction of iron metal with oxygen to form iron (III) oxide.

6. Aluminum metal is oxidized by oxygen (from the air) rust in a synthesis reaction.

7. Sodium oxide reacts with carbon dioxide in a synthesis reaction to form sodium carbonate.

8. Calcium metal reacts with water to form calcium hydroxide and hydrogen gas.

9. Barium metal reacts with iron (III) sulfate to produce barium sulfate and iron.

10. Barium chloride reacts with sodium sulfate to prorduce barium sulfate and sodium chloride.