

Name: \_\_\_\_\_

Blk: \_\_\_\_\_ Date: \_\_\_\_\_

**Chemistry 11**  
**PREDICTING PRODUCTS FOR CHEMICAL REACTIONS**

**Type 1. SYNTHESIS:  $A + B \rightarrow AB$**

What to look for: \_\_\_\_\_

How to predict the products: \_\_\_\_\_

\_\_\_\_\_

Examples:

**Type 2. DECOMPOSITION:  $AB \rightarrow A + B$**

What to look for: \_\_\_\_\_

How to predict the products: \_\_\_\_\_

\_\_\_\_\_

Examples:

**Type 3. SINGLE REPLACEMENT:  $M + AB \rightarrow MB + A$  or  $N + AB \rightarrow AN + B$**

What to look for: \_\_\_\_\_

How to predict the products: \_\_\_\_\_

\_\_\_\_\_

Examples:

**Type 4. DOUBLE REPLACEMENT:  $AB + XY \rightarrow AY + XB$**

What to look for: \_\_\_\_\_

How to predict the products: \_\_\_\_\_

\_\_\_\_\_

Examples:

Identifying the phases of the products: USING THE TABLE OF SOLUBILITIES

**Soluble:** The substance will form an aqueous solution and have the symbol (  $aq$  ).

**Low Solubility:** The substance will form a precipitate and have the symbol (  $s$  ).

**TYPE 5. NEUTRALIZATION:  $HB + AOH \rightarrow AB + H_2O(l)$**

What to look for: \_\_\_\_\_

How to predict the products: \_\_\_\_\_

\_\_\_\_\_

Examples:

**TYPE 6. COMBUSTION :  $C_xH_y + O_2 \rightarrow CO_2 + H_2O(g)$**

What to look for: \_\_\_\_\_

How to predict the products: \_\_\_\_\_

\_\_\_\_\_

Examples: