SNC2DI Name: __**ANSWERS**__

Type of Reactions Practice

Part A: *For each of the following skeleton equations, identify the type of reaction that is occurring. You DO NOT need to balance them.*

1) $KClO_3 \rightarrow KCl + O_2$ ____**decomposition**_____

2) $HCl + Fe_2O_3 \rightarrow FeCl_3 + H_2O$ ____**double displacement**_____

3) $C_6H_6 + O_2 \rightarrow CO_2 + H_2O$ ____**combustion**____

4) $S_8 + O_2 \rightarrow SO_2$ ____**synthesis**_____

5) $Fe_2O_3 + H_2 \rightarrow Fe + H_2O$ ____**single displacement**_____

6) $Al + O_2 \rightarrow Al_2O_3$ ____**synthesis**_____

7) $AsCl_3 + H_2S \rightarrow As_2S_3 + HCl$ ____**double displacement**_____

8) $Al + H_2SO_4 \rightarrow H_2 + Al_2(SO_4)_3$ ____**single displacement**____

Part B: *For each of the following reactants, predict the possible products that would be produced. You DO NOT need to balance them.*

1) $C_3H_8 + O_2$ (insufficient) $\rightarrow$ $\mathbf{CO_{2(g)} + H_2O_{(g)} + CO_{(g)} + C_{(s)}}$

2) $NO_2 + H_2O \rightarrow \mathbf{HNO_{3(aq)}}$

3) $BaCl_2 + Na_2SO_4 \rightarrow \mathbf{BaSO_4 + NaCl}$

4) $Al + Fe_2O_3 \rightarrow \mathbf{Al_2O_3 + Fe}$

5) $Fr + O_2 \rightarrow \mathbf{Fr_2O}$

6) $Ag + Pb_3(PO_4)_2 \rightarrow \mathbf{Ag_3PO_4 + Pb}$

7) $HBr \rightarrow \mathbf{H_2 + Br_2}$

8) $K_2CO_3 + CaI_2 \rightarrow \mathbf{KI + CaCO_3}$