

<u>Directions:</u> Complete the following equations. (Some reactions will already be complete.) After they are complete, <u>balance them</u>. Indicate in the blank to the left of each question whether the reaction is a single replacement (SR), double replacement (DR), synthesis (S), decomposition (D), or combustion (C).

$$\underline{C}$$
 1. $C_4H_8 + 6O_2 \rightarrow 4CO_2 + 4H_2O$

$$\underline{DR}$$
 2. Al₂(CO₃)₃ + $\underline{6 \text{ NaNO}_3}$ \rightarrow 2 Al(NO₃)₃ + 3 Na₂CO₃

$$\underline{S}$$
 3. 2 Li + $\underline{Br_2}$ \rightarrow 2 LiBr

$$\underline{\underline{D}}$$
 4. 2 Na₂CO₃ \rightarrow 4 Na + 2 C + 3 O₂

$$_SR$$
 5. Mg + 2 CuCl \rightarrow MgCl₂ + 2 Cu

DR 6.
$$3 \text{ CaCl}_2 + 2 \text{ Al(NO}_3)_3 \rightarrow 3 \text{ Ca(NO}_3)_2 + 2 \text{ AlCl}_3$$

$$\underline{SR}$$
 7. $Ca_3(PO_4)_2 + 2Al \rightarrow 2AlPO_4 + 3Ca$

$$\underline{\underline{S}}$$
 9. $\underline{2}$ Ca + \underline{O}_2 $\xrightarrow{2}$ CaO

$$\underline{\underline{D}} 10. \quad \underline{2} \text{ N}_2 \text{O}_5 \quad \overrightarrow{\rightarrow} \quad \underline{2} \text{ N}_2 \quad + \quad \underline{5} \text{ O}_2$$