

Classify each of the following reactions as synthesis (S), decomposition (D), single replacement (SR), double replacement (DR), neutralization (N), or combustion (C). Place the correct letter representing the reaction type in the space provided. Then **balance** the chemical equation by placing the correct coefficients in the equation.

Balanced Chemical Equation	Type of Reaction
1. $N_2 + F_2 \rightarrow NF_3$	S
2. $KClO_3 \rightarrow KCl + O_2$	D
3. $C_{12}H_{22}O_{11} + O_2 \rightarrow CO_2 + H_2O$	C
4. $CuSO_4 + Fe \rightarrow Fe_2(SO_4)_3 + Cu$	SR
5. $MgF_2 + Li_2CO_3 \rightarrow MgCO_3 + LiF$	DR
6. $H_3PO_4 + NH_4OH \rightarrow H_2O + (NH_4)_3PO_4$	DR N
7. $NaF + Br_2 \rightarrow NaBr + F_2$	SR
8. $CH_3OH + O_2 \rightarrow CO_2 + H_2O$	C
9. $ZnCl_2 \rightarrow Zn + Cl_2$	D
10. $H_2SO_4 + KOH \rightarrow H_2O + K_2SO_4$	N
11. $LiCl + Br_2 \rightarrow LiBr + Cl_2$	SR
12. $HI \rightarrow H_2 + I_2$	D

13. Complete Practice problems on p. 265