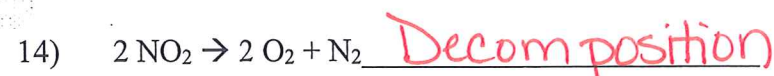
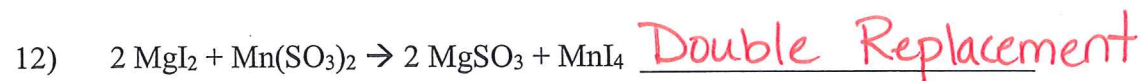
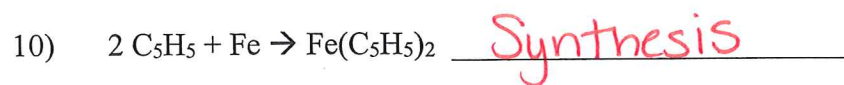
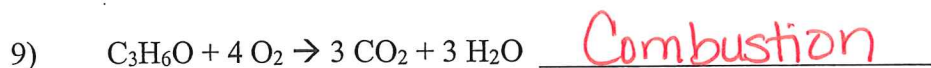
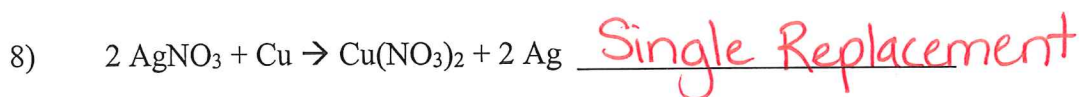
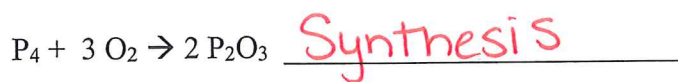
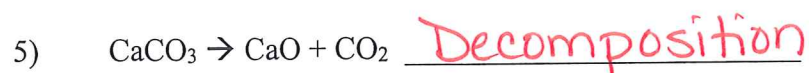
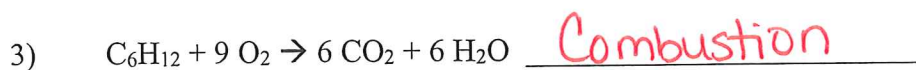
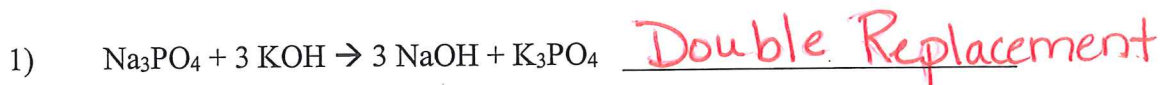


Chapter 10 Practice Problems

(Honors Chemistry)

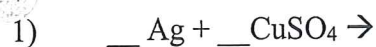
Section 1: For the following reactions, indicate whether the following are examples of synthesis, decomposition, combustion, single replacement, or double replacement:



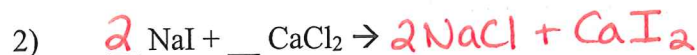
Section 2: Practicing equation balancing

- 1) $\underline{2} \text{C}_6\text{H}_6 + \underline{15} \text{O}_2 \rightarrow \underline{6} \text{H}_2\text{O} + \underline{12} \text{CO}_2$
- 2) $\underline{4} \text{NaI} + \underline{\quad} \text{Pb}(\text{SO}_4)_2 \rightarrow \underline{\quad} \text{PbI}_4 + \underline{2} \text{Na}_2\text{SO}_4$
- 3) $\underline{4} \text{NH}_3 + \underline{5} \text{O}_2 \rightarrow \underline{4} \text{NO} + \underline{6} \text{H}_2\text{O}$
- 4) $\underline{2} \text{Fe}(\text{OH})_3 \rightarrow \underline{\quad} \text{Fe}_2\text{O}_3 + \underline{3} \text{H}_2\text{O}$
- 5) $\underline{2} \text{HNO}_3 + \underline{\quad} \text{Mg}(\text{OH})_2 \rightarrow \underline{2} \text{H}_2\text{O} + \underline{\quad} \text{Mg}(\text{NO}_3)_2$
- 6) $\underline{\quad} \text{H}_3\text{PO}_4 + \underline{3} \text{NaBr} \rightarrow \underline{3} \text{HBr} + \underline{\quad} \text{Na}_3\text{PO}_4$
- 7) $\underline{3} \text{C} + \underline{4} \text{H}_2 \rightarrow \underline{\quad} \text{C}_3\text{H}_8$
- 8) $\underline{2} \text{CaO} + \underline{\quad} \text{MnI}_4 \rightarrow \underline{\quad} \text{MnO}_2 + \underline{2} \text{CaI}_2$
- 9) $\underline{\quad} \text{Fe}_2\text{O}_3 + \underline{3} \text{H}_2\text{O} \rightarrow \underline{2} \text{Fe}(\text{OH})_3$
- 10) $\underline{\quad} \text{C}_2\text{H}_2 + \underline{2} \text{H}_2 \rightarrow \underline{\quad} \text{C}_2\text{H}_6$
- 11) $\underline{2} \text{VF}_5 + \underline{10} \text{HI} \rightarrow \underline{\quad} \text{V}_2\text{I}_{10} + \underline{10} \text{HF}$
- 12) $\underline{\quad} \text{OsO}_4 + \underline{2} \text{PtCl}_4 \rightarrow \underline{2} \text{PtO}_2 + \underline{\quad} \text{OsCl}_8$
- 13) $\underline{\quad} \text{CF}_4 + \underline{2} \text{Br}_2 \rightarrow \underline{\quad} \text{CBr}_4 + \underline{2} \text{F}_2$
- 14) $\underline{2} \text{Hg}_2\text{I}_2 + \underline{\quad} \text{O}_2 \rightarrow \underline{2} \text{Hg}_2\text{O} + \underline{2} \text{I}_2$
- 15) $\underline{\quad} \text{Y}(\text{NO}_3)_2 + \underline{\quad} \text{GaPO}_4 \rightarrow \underline{\quad} \text{YPO}_4 + \underline{\quad} \text{Ga}(\text{NO}_3)_2$ *balanced*

Section 3: Predict the products of the following reaction and write which type of reaction it is.



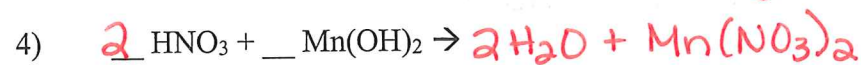
Type: No Reaction



Type: Double Replacement



Type: Synthesis



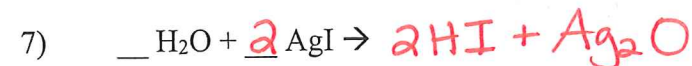
Type: Neutralization



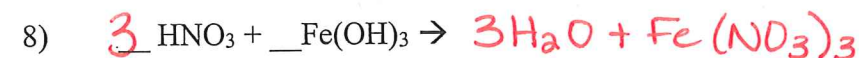
Type: Double Replacement



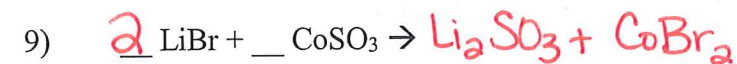
Type: Double Replacement



Type: Double Replacement



Type: Neutralization



Type: Double Replacement



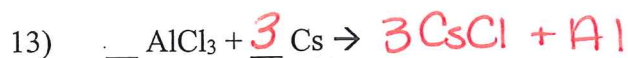
Type: No Reaction



Type: Synthesis



Type: Decomposition



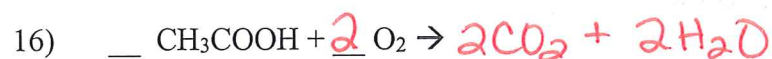
Type: Single Replacement



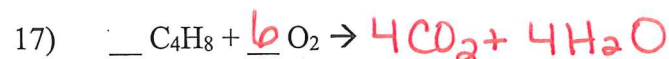
Type: No Reaction



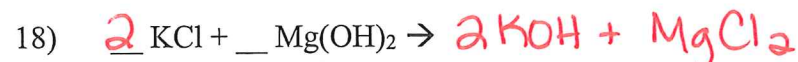
Type: Neutralization



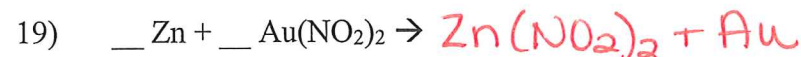
Type: Combustion



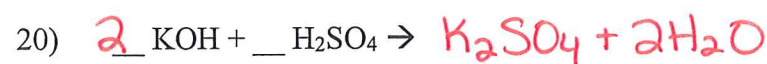
Type: Combustion



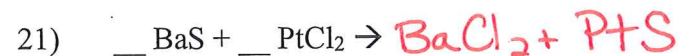
Type: Double Replacement



Type: Single Replacement



Type: Neutralization



Type: Double Replacement



Type: Decomposition