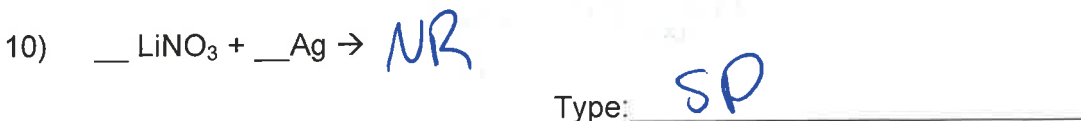
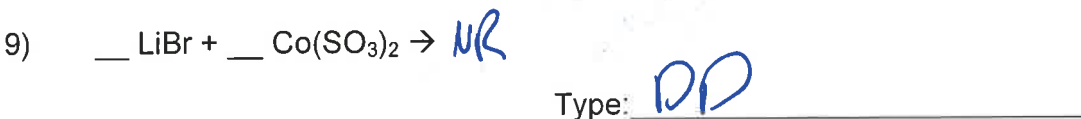
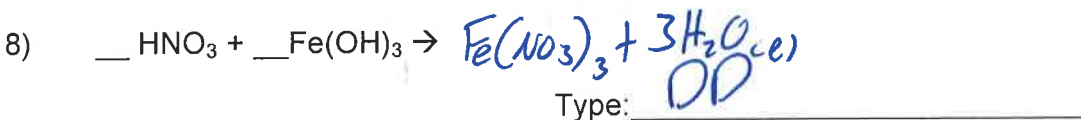
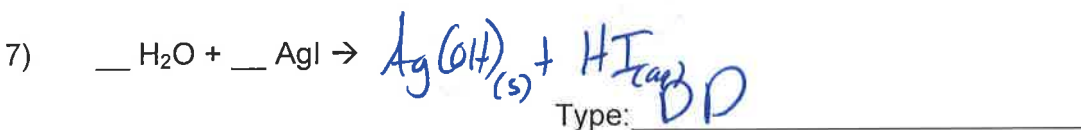
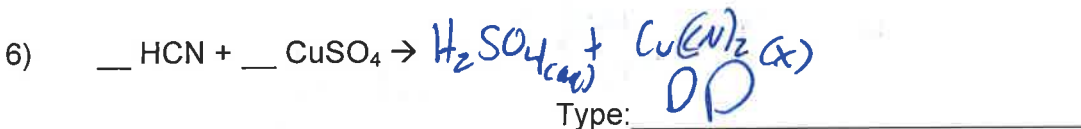
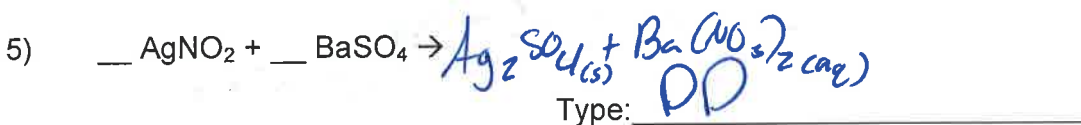
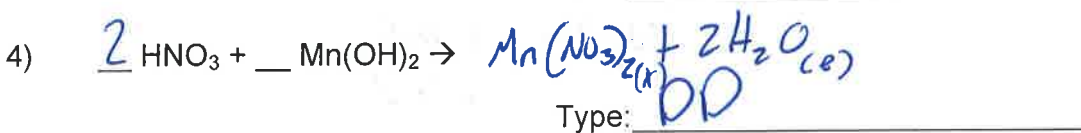
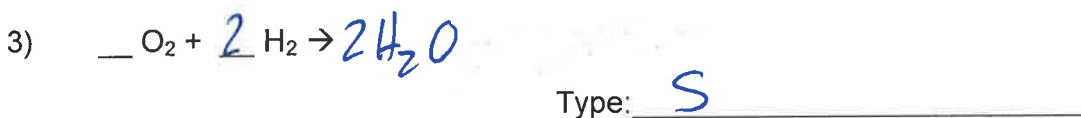
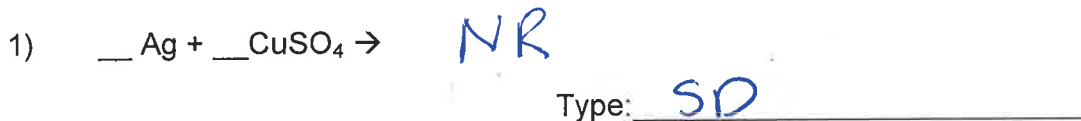


Section 3: Predicting the products of chemical reactions

Predict the products of the following reactions:



- $$\text{N}_2 + 2\text{O}_2 \rightarrow 2\text{NO}_2$$
 11) $\text{N}_2 + \text{O}_2 \rightarrow \text{N}_2\text{O}_2(\text{g})$
 (multiple answers) Type: S
- $$\text{H}_2\text{CO}_3 \rightarrow \text{H}_2\text{O}(\text{l}) + \text{CO}_2(\text{g})$$
 12) Type: D
- $$\text{AlCl}_3 + 3\text{Cs} \rightarrow 3\text{CsCl}(\text{aq}) + \text{Al}(\text{s})$$
 13) Type: SP
- $$\text{Al}(\text{NO}_3)_3 + \text{Ga} \rightarrow \text{Ga}(\text{NO}_3)_3 + \text{Al}(\text{s})$$
 14) Type: SP
- $$\text{H}_2\text{SO}_4 + \text{NH}_4\text{OH} \rightarrow (\text{NH}_4)_2\text{SO}_4(\text{aq}) + \text{H}_2\text{O}(\text{l})$$
 15) Type: DD
- $$\text{CH}_3\text{COOH} + 2\text{O}_2 \rightarrow 2\text{CO}_2(\text{g}) + 2\text{H}_2\text{O}(\text{l})$$
 16) Type: Combustion
- $$\text{C}_4\text{H}_8 + 6\text{O}_2 \rightarrow 4\text{CO}_2(\text{g}) + 4\text{H}_2\text{O}(\text{l})$$
 17) Type: Combustion
- $$\text{KCl} + \text{Mg}(\text{OH})_2 \rightarrow \text{NR}$$
 18) Type: DD
- $$\text{Zn} + \text{Au}(\text{NO}_2)_2 \rightarrow \text{Au}(\text{s}) + \text{Zn}(\text{NO}_2)_2(\text{aq})$$
 19) Type: SD
- $$2\text{KOH} + \text{H}_2\text{SO}_4 \rightarrow \text{K}_2\text{SO}_4(\text{aq}) + 2\text{H}_2\text{O}(\text{l})$$
 20) Type: DD
- $$\text{BaS} + \text{PtCl}_2 \rightarrow \text{PtS}(\text{s}) + \text{BaCl}_2(\text{aq})$$
 21) Type: DD
- $$2\text{Na}_2\text{O} \rightarrow 4\text{Na}(\text{s}) + \text{O}_2(\text{g})$$
 22) Type: Decompo