Answer on Question #53421 - Chemistry – Inorganic Chemistry

Question:

Classify as to what type of chemical reaction each one belongs:

1. $H_2CO_3 \rightarrow H_2O + CO_2$

2. $C_6H_{12}O_6 \rightarrow 12C + 11H_2O$

3. $CdCl_2 + H_2S \rightarrow CdS + 2HCl$

4. $2Al + O_2 \rightarrow Al_2O_3$

5. $Mg + H_2SO_4 \rightarrow MgSO_4 + H_2$

6. $CaCO_3 \rightarrow CaO + CO_2$

7. $Na_2O + H_2O \rightarrow 2NaOH$

8. $FeCl_3 + 3NaOH \rightarrow Fe(OH)_3 + 3NaCl$

9. $3H_2 + Fe_2O_3 \rightarrow 3H_2O + 2Fe$

10. $2H_2 + O_2 \rightarrow 2H_2O$

Answer:

1. $H_2CO_3 \rightarrow H_2O + CO_2$ – decomposition reaction

2. $C_6H_{12}O_6 \rightarrow 12C + 11H_2O$ – decomposition reaction

3. $CdCl_2 + H_2S \rightarrow CdS + 2HCl$ – double displacement reaction

4. $2Al + O_2 \rightarrow Al_2O_3$ – synthesis reaction

5. $Mg + H_2SO_4 \rightarrow MgSO_4 + H_2$ – single displacement reaction

6. $CaCO_3 \rightarrow CaO + CO_2$ – decomposition reaction

7. $Na_2O + H_2O \rightarrow 2NaOH$ – synthesis reaction

8. $FeCl_3 + 3NaOH \rightarrow Fe(OH)_3 + 3NaCl$ – double displacement reaction

9. $3H_2 + Fe_2O_3 \rightarrow 3H_2O + 2Fe$ – single displacement reaction

10. $2H_2 + O_2 \rightarrow 2H_2O$ – synthesis reaction