

CHEMICAL REACTIONS WORKSHEET I

1. $\text{Zn} + 2\text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$ Single Replacement
2. $2\text{H}_2\text{O} \rightarrow 2\text{H}_2 + \text{O}_2$ Decomposition
3. $2\text{NaOH} + \text{Pb}(\text{NO}_3)_2 \rightarrow 2\text{NaNO}_3 + \text{Pb}(\text{OH})_2$
Double Replacement
4. $\text{H}_2\text{O} + \text{CO}_2 \rightarrow \text{H}_2\text{CO}_3$ Already balanced, Synthesis
5. $2\text{C}_4\text{H}_{10} + 13\text{O}_2 \rightarrow 8\text{CO}_2 + 10\text{H}_2\text{O}$ Combustion
6. $\text{CuSO}_4 + \text{Mg} \rightarrow \text{MgSO}_4 + \text{Cu}$ Already balanced, Single Replacement
7. $2\text{C}_6\text{H}_6(\text{l}) + 15\text{O}_2(\text{g}) \rightarrow 12\text{CO}_2(\text{g}) + 6\text{H}_2\text{O}(\text{l})$ Combustion
8. $\text{H}_2\text{O}(\text{l}) + \text{SO}_2(\text{g}) \rightarrow \text{H}_2\text{SO}_3(\text{aq})$ Already balanced, Synthesis
9. $\text{Na}_2\text{CO}_3(\text{aq}) + 2\text{NH}_4\text{OH}(\text{aq}) \rightarrow (\text{NH}_4)_2\text{CO}_3(\text{aq}) + 2\text{NaOH}(\text{aq})$ Double Replacement
10. $(\text{NH}_4)_2\text{CO}_3(\text{aq}) \rightarrow 2\text{NH}_3(\text{g}) + \text{H}_2\text{O}(\text{l}) + \text{CO}_2(\text{g})$ Decomposition
11. $4\text{HNO}_3(\text{aq}) + \text{Cu}(\text{s}) \rightarrow \text{Cu}(\text{NO}_3)_2(\text{aq}) + 2\text{NO}_2(\text{g}) + 2\text{H}_2\text{O}(\text{l})$ Synthesis (sort of)
12. $\text{Pb}(\text{NO}_3)_2(\text{aq}) + 2\text{NaCl}(\text{aq}) \rightarrow \text{PbCl}_2(\text{s}) + 2\text{NaNO}_3(\text{aq})$ Double Replacement
13. $2\text{Fe}(\text{s}) + \text{O}_2(\text{g}) \rightarrow 2\text{FeO}(\text{s})$ Synthesis, Combustion
14. $4\text{Fe}(\text{s}) + 3\text{O}_2(\text{g}) \rightarrow 2\text{Fe}_2\text{O}_3(\text{s})$ Synthesis, Combustion
15. $4\text{FeO}(\text{s}) + \text{O}_2(\text{g}) \rightarrow 2\text{Fe}_2\text{O}_3(\text{s})$ Synthesis, Combustion
16. $\text{Au}_2\text{S}_3(\text{s}) + 3\text{H}_2(\text{g}) \rightarrow 2\text{Au}(\text{s}) + 3\text{H}_2\text{S}(\text{g})$ Single Replacement