

**Skillsheet 6-1****Classifying Chemical Reactions**

From the list below, determine which type of chemical reaction is taking place in each of the reactions that follow:

synthesis reaction

decomposition reaction

single-replacement reaction

double-replacement reaction

- |   |           |
|---|-----------|
| 1. $\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$                         | 1. _____  |
| 2. $\text{H}_2\text{O} \rightarrow \text{H}_2 + \text{O}_2$                         | 2. _____  |
| 3. $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$          | 3. _____  |
| 4. $\text{C}_3\text{H}_7\text{I} \rightarrow \text{C}_3\text{H}_6 + \text{HI}$      | 4. _____  |
| 5. $\text{FeCl}_2 + \text{Na}_2\text{CO}_3 \rightarrow \text{NaCl} + \text{FeCO}_3$ | 5. _____  |
| 6. $\text{NaBr} \rightarrow \text{Na} + \text{Br}_2$                                | 6. _____  |
| 7. $\text{Na} + \text{Cl}_2 \rightarrow \text{NaCl}$                                | 7. _____  |
| 8. $\text{Al} + \text{CuCl}_2 \rightarrow \text{AlCl}_3 + \text{Cu}$                | 8. _____  |
| 9. $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$                  | 9. _____  |
| 10. $\text{HCl} + \text{KOH} \rightarrow \text{KCl} + \text{H}_2\text{O}$           | 10. _____ |