

Name \_\_\_\_\_ Hour \_\_\_\_\_

### Practice 17: Classifying and Balancing Chemical Reactions

- Balance each reaction (IF THEY ARE NOT BALANCED ALREADY).
- Classify each reaction as decomposition, synthesis, single replacement, double replacement, or combustion.

BALANCE REACTION	CLASSIFY REACTION
1. $\text{NH}_3 + \text{HCl} \rightarrow \text{NH}_4\text{Cl}$	_____
2. $\text{H}_2\text{SO}_4 + \text{Fe} \rightarrow \text{H}_2 + \text{FeSO}_4$	_____
3. $\text{Zn} + \text{S} \rightarrow \text{ZnS}$	_____
4. $\text{Al}_2\text{S}_3 \rightarrow \text{Al} + \text{S}$	_____
5. $\text{C}_{12}\text{H}_{22}\text{O}_{11} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$	_____
6. $\text{NaOH} + \text{CuSO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{Cu(OH)}_2$	_____
7. $\text{Cl}_2 + \text{KBr} \rightarrow \text{KCl} + \text{Br}_2$	_____
8. $\text{C}_4\text{H}_{12} + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$	_____
9. $\text{Mg}_3(\text{PO}_4)_2 + \text{H}_2 \rightarrow \text{Mg} + \text{H}_3\text{PO}_4$	_____
10. $\text{NH}_4\text{NO}_3 \rightarrow \text{N}_2\text{O} + \text{H}_2\text{O}$	_____