

Name:

Honors Chemistry

Section:

Classifying chemical reactions

Directions:

First, classify the following reactions as synthesis, decomposition, single replacement, double displacement, or combustion. Then, identify the reactions as redox or non-redox.

Reaction	Class	Redox? Y or N
1. $3 \text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$		
2. $2 \text{C}_2\text{H}_6 + 7 \text{O}_2 \rightarrow 4 \text{CO}_2 + 6 \text{H}_2\text{O}$		
3. $2 \text{H}_2\text{O} \rightarrow 2 \text{H}_2 + \text{O}_2$		
4. $\text{Zn} + \text{H}_2\text{SO}_4 \rightarrow \text{ZnSO}_4 + \text{H}_2$		
5. $2 \text{HgO} \rightarrow 2 \text{Hg} + \text{O}_2$		
6. $2 \text{KBr} + \text{Cl}_2 \rightarrow 2 \text{KCl} + \text{Br}_2$		
7. $\text{CaO} + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2$		
8. $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$		
9. $2 \text{H}_2\text{O}_2 \rightarrow 2 \text{H}_2\text{O} + \text{O}_2$		
10. $\text{Ca}(\text{OH})_2 + \text{H}_2\text{SO}_4 \rightarrow \text{CaSO}_4 + 2 \text{H}_2\text{O}$		
11. $\text{CH}_4 + 2 \text{O}_2 \rightarrow \text{CO}_2 + 2 \text{H}_2\text{O}$		
12. $2 \text{Li} + \text{Cu}(\text{NO}_3)_2 \rightarrow 2 \text{LiNO}_3 + \text{Cu}$		