

## ELECTROCHEMISTRY LESSON-2 RE-QUIZ: Oxidation Numbers

1. What is the oxidation number for nitrogen in dinitrogen tetroxide,  $\text{N}_2\text{O}_4$  ?  
A. 0  
B. +1  
C. +2  
D. +3  
E. +4
2. What is the oxidation number for copper in copper(II) sulfate,  $\text{CuSO}_4$  ?  
A. 0  
B. +1  
C. +2  
D. +3  
E. +4
3. What is the oxidation number for oxygen in oxygen molecules,  $\text{O}_2$  ?  
A. 0  
B. -1  
C. -2  
D. -3  
E. -4
4. What is the oxidation number for bromine in potassium perbromate,  $\text{KBrO}_4$  ?  
A. +1  
B. +3  
C. +5  
D. +7  
E. +9
5. What is the oxidation number for boron in tetraborate ions,  $\text{B}_4\text{O}_7^{2-}$  ?  
A. +1  
B. +3  
C. +5  
D. +7  
E. +9
6. What is the oxidation number for hydrogen in lithium aluminum hydride,  $\text{LiAlH}_4$  ?  
A. -2  
B. -1  
C. 0  
D. +1  
E. +2
7. Which element is oxidized in the following reaction?  
 $3 \text{CO} + \text{Fe}_2\text{O}_3 \rightarrow 3 \text{CO}_2 + 2 \text{Fe}$   
A. carbon  
B. oxygen  
C. iron
8. Which element is reduced in the following reaction?  
 $3 \text{CO} + \text{Fe}_2\text{O}_3 \rightarrow 3 \text{CO}_2 + 2 \text{Fe}$   
A. carbon  
B. oxygen  
C. iron
9. Which element is oxidized in the following reaction?  
 $\text{MnO}_2 + 2 \text{NO}_2 \rightarrow \text{Mn}^{2+} + 2 \text{NO}_3^-$   
A. manganese  
B. oxygen  
C. nitrogen
10. Which element is reduced in the following reaction?  
 $\text{MnO}_2 + 2 \text{NO}_2 \rightarrow \text{Mn}^{2+} + 2 \text{NO}_3^-$   
A. manganese  
B. oxygen  
C. nitrogen

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### ANSWERS

1. E   2. C   3. A   4. D   5. B   6. B   7. A   8. C   9. B   10. A