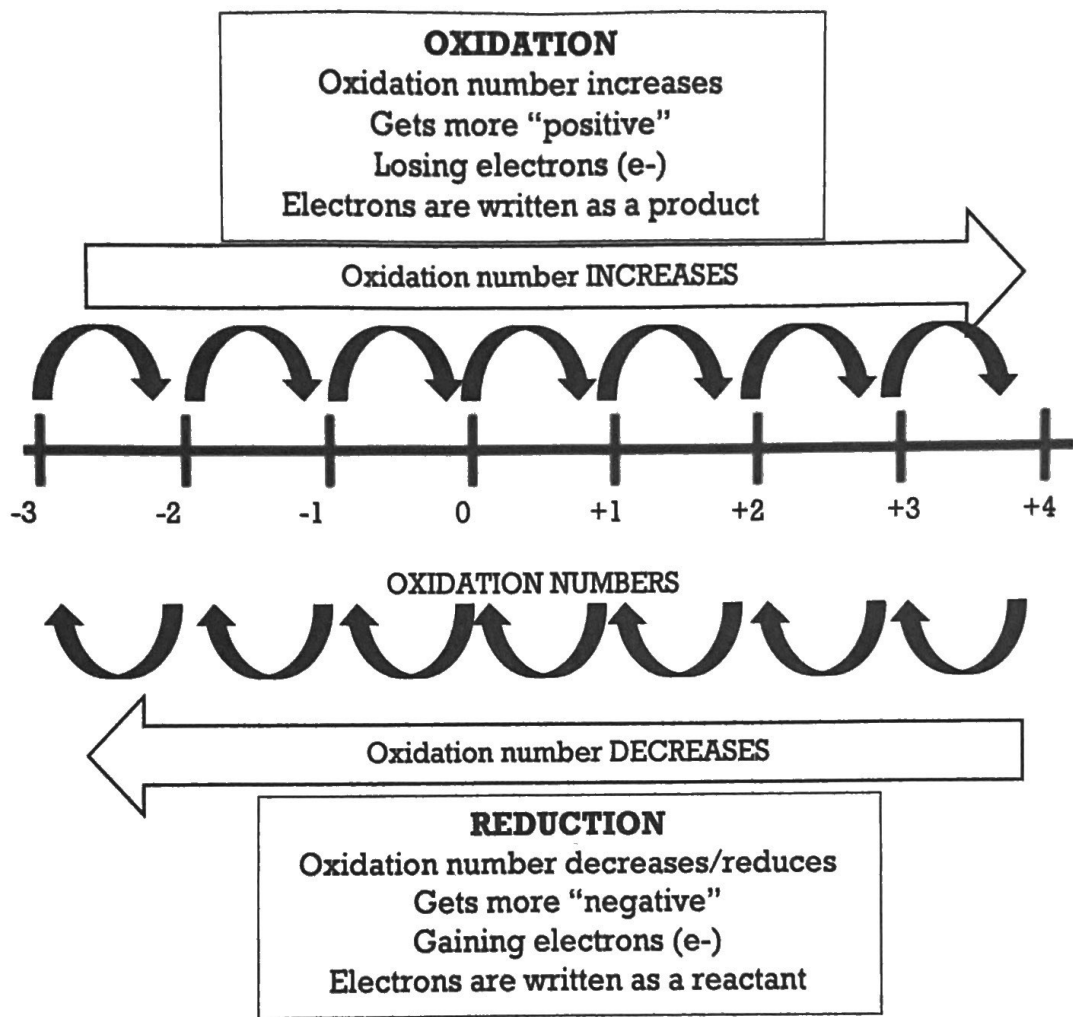


Oxidation or Reduction?



Directions: Determine if oxidation or reduction is occurring. Explain your answer.

- $0 \rightarrow +3$: oxidation because ox # increases (electrons lost)
- $+2 \rightarrow +1$: reduction because ox # decreases / reduced (electrons gained)
- $-2 \rightarrow -4$: reduction because ox # decreases / reduced (electrons gained)
- $-1 \rightarrow 0$: oxidation because ox # increases (electrons lost)
- $+2 \rightarrow 0$: reduction because ox # decreases / reduced (electrons gained)
- $-1 \rightarrow +1$: oxidation because ox # increases (electrons lost)
- $\text{Fe}^{3+} + \underline{3e^-} \rightarrow \text{Fe}^0$: reduction because ox # decreases (electrons gained) e⁻ = reactant
- $\text{Fe}^0 \rightarrow \text{Fe}^{3+} + \underline{3e^-}$: oxidation because ox # increases (electrons lost) e⁻ = product
- $\text{Cu}^0 \rightarrow \text{Cu}^{2+} + \underline{2e^-}$: oxidation because ox # increases (electrons lost) e⁻ = product
- $\text{Cl}_2^0 + \underline{2e^-} \rightarrow 2\text{Cl}^-$: reduction because ox # decreases / reduced (electrons gained) e⁻ = reactant