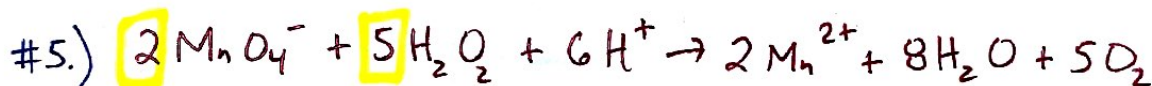


AP Unit 3 Test Review Kahoot

#2.) $1\text{F} = 1\text{mole } e^- \Rightarrow 1\text{mole } e^- \times \frac{1\text{mol Cu}}{1\text{mole } e^-} = \boxed{1\text{mol Cu}} > 0.5\text{mol}, 0.33\text{mol}$
 $\text{CuNO}_3 \text{ (b/c Cu}^+)$

$$\left. \begin{aligned} 1\text{mole } e^- \times \frac{1\text{mol Cu}}{2\text{mole } e^-} &= 0.5\text{mol Cu} \\ \text{Cu(NO}_3)_2 \text{ (b/c Cu}^{2+}) \end{aligned} \right\} \left. \begin{aligned} 1\text{mole } e^- \times \frac{1\text{mol Cu}}{3\text{mole } e^-} &= 0.\bar{3}\text{mol Cu} \\ \text{Cu(NO}_3)_3 \text{ (b/c Cu}^{3+}) \end{aligned} \right.$$



$$30.\text{mL} \times 0.10\text{M} = 3.0\text{mmol MnO}_4^- \times \frac{5\text{mol H}_2\text{O}_2}{2\text{mol MnO}_4^-} = \frac{15}{2} = 7.5\text{mmol H}_2\text{O}_2$$

$$[\text{H}_2\text{O}_2]_i = \frac{7.5\text{mmol}}{40.\text{mL}} \approx \frac{8}{40} = \frac{1}{5} = \boxed{0.2\text{M}} \text{ (0.19M)}$$

#8.) $10.8\text{g Ag} \times \frac{1\text{mol Ag}}{108\text{g Ag}} \times \frac{1\text{mole } e^-}{1\text{mol Ag}} \times \frac{96,485\text{C}}{1\text{mole } e^-} \times \frac{1\text{s}}{1.06\text{C}} \approx \frac{1\phi \times 100,00\phi}{1\phi\phi} = \boxed{10,000\text{Sec}}$
 (9,110s)

#10.) $125\text{g Co} \times \frac{1\text{mol Co}}{\sim 60\text{g Co}} \times \frac{3\text{mole } e^-}{1\text{mol Co}} \approx \frac{120 \times 3}{60} = \boxed{6\text{mole } e^-}$
 (6.36mole⁻)
 $\text{Co}_2\text{S}_3 \text{ (b/c Co}^{3+})$

#15.) $2.0\text{min} \times \frac{60\text{s}}{1\text{min}} \times \frac{10.3\text{C}}{1\text{s}} \times \frac{1\text{mole } e^-}{96,485\text{C}} \times \frac{1\text{mol Ni}}{2\text{mole } e^-} \times \frac{58.7\text{g Ni}}{1\text{mol Ni}}$
 $\text{NiSO}_4 \text{ (b/c Ni}^{2+})$