

$$\textcircled{13} \quad \Delta G = \Delta H - T \Delta S \quad \left\{ \begin{array}{l} \Delta G = [3(86.7)] - [1(103.6) + 1(51.8)] \\ 104.7 = \Delta H - (298)(0.173) \end{array} \right.$$

$$\textcircled{14} \quad \Delta G = \Delta H - T \Delta S$$

$$= 137 - (0.12)$$

Spont \ominus

Non Spont \ominus

$\uparrow T$

$\downarrow T$

Mar 25-7:20 AM

$$\textcircled{19} \quad \Delta G = -RT \ln K \quad \left\{ \begin{array}{l} \Delta G = [77 + 2(-497)] - [-943] \\ 26 = -(8.314 \times 10^{-3})(298) \ln K \\ \Delta G = \oplus 26 \text{ kJ} \end{array} \right.$$

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$\Delta G = \Delta H - T \Delta S$
 $-121 = -151 - 298 \Delta S$
 $\Delta S = 0.101 \text{ KJ}$
 101 J

Spont \leftrightarrow Non Spont
 $\Delta G = 0$
 $0 = -151 - T(0.101)$
 $T = \frac{151}{0.101} = \sim 1500 \text{ K}$

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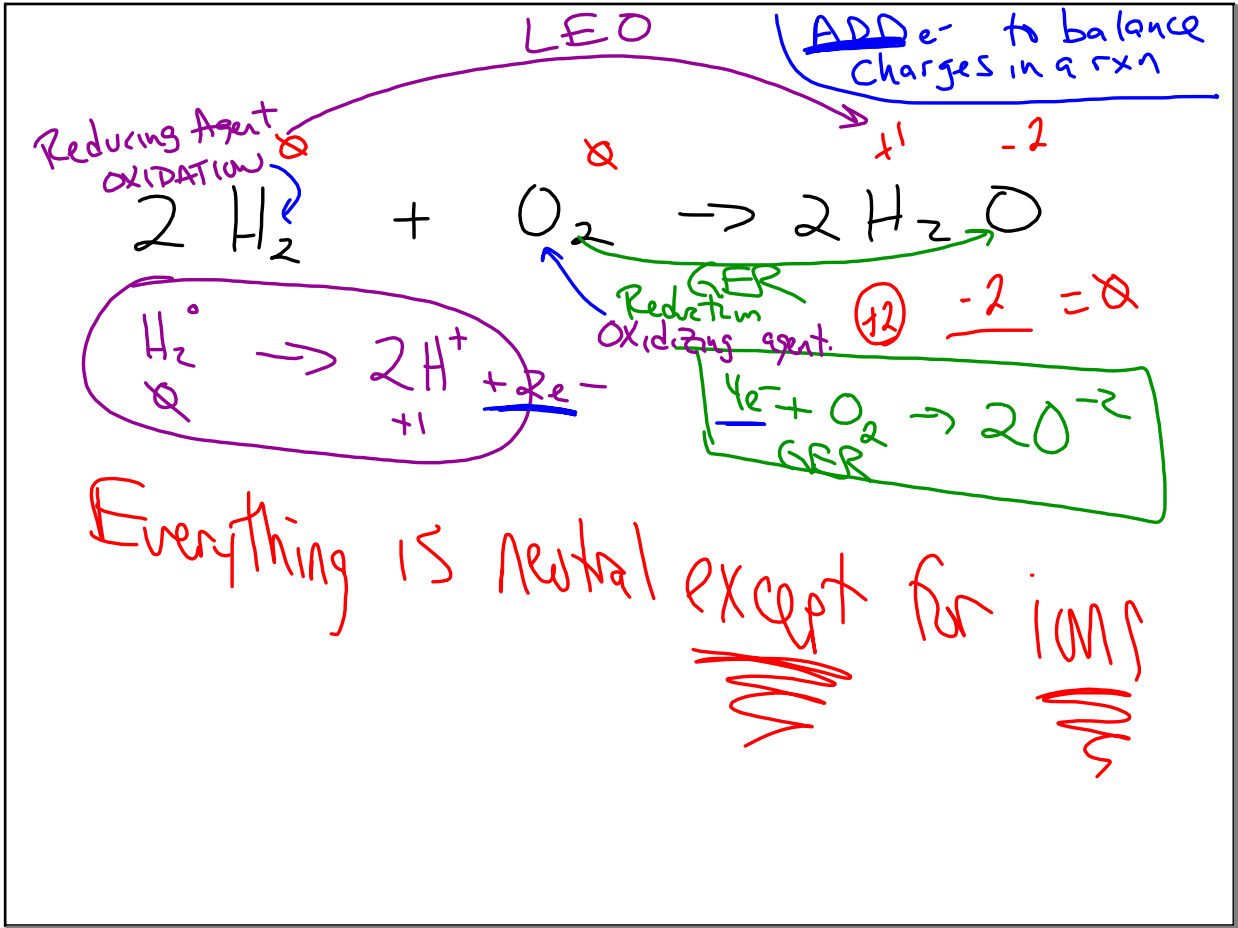
Chap 20 Redox + electrochem.
 ↳ flow of e^-

Reduction
 GER (RIG)
 FAT RED (AT)

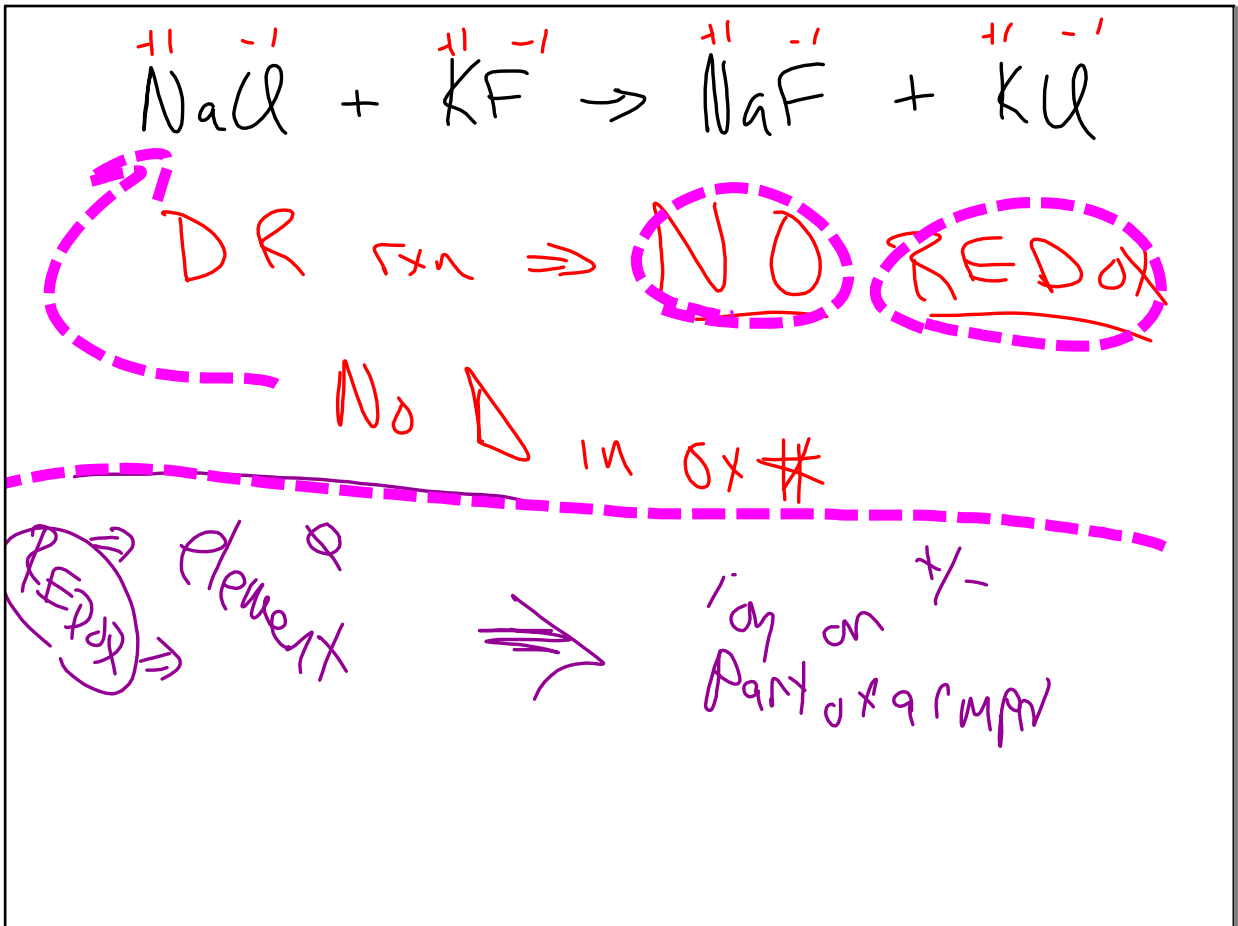
Oxidation
 LEO (OIL)

⇒ Reduction occurs at Cathode and gains MgS_2

Mar 25-8:26 AM



Mar 25-8:33 AM



Mar 25-8:42 AM

$$20 / 12 + 16$$

Mar 25-8:45 AM