

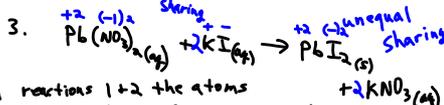
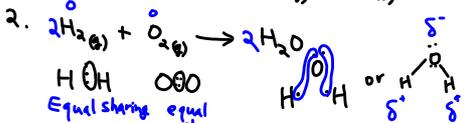
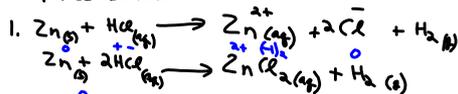
Vinegar 5% Lab Calculations

$$8. \frac{0.79 \text{ mol } \cancel{\text{CH}_3\text{COOH}}}{1} \times \frac{60.06 \text{ g } \cancel{\text{CH}_3\text{COOH}}}{1 \text{ mol } \cancel{\text{CH}_3\text{COOH}}} \times 0.14 = 4.75\% \frac{\text{g}}{100\text{g}}$$

Acid/Base Assignment

Oxidation Reduction Reactions- Demonstrations

Text Reference- Chapter 18
Three Demonstrations-



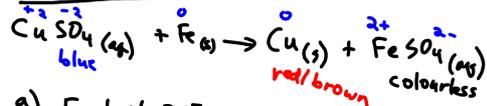
In reactions 1+2 the atoms change their charge. (Lose or gain e⁻)

In reaction 3 there is no change in charge.
Read- 712-714

Identifying Oxidation and Reduction

In some chemical reactions, particles change their charge by losing or gaining e⁻.

Demonstration-



a) Fe lost 2e⁻

OXIDATION

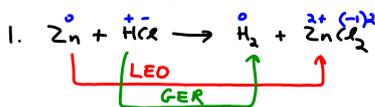


b) Cu²⁺ gained 2e⁻

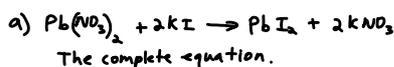
REDUCTION



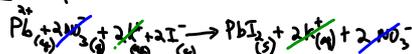
Identifying Redox Reactions



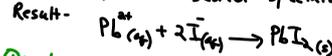
Net Ionic Equations



b) Ionic equation-



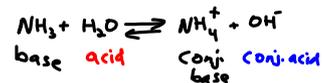
c) Net ionic equation- "Deduct" spectator ions.



Questions- p. 715 #1,2

Acid-Base Review

1. Acid-base pairs-



2. What is the pH of a 0.050 mol/L solution of acid HX (K_a = 1.2 x 10⁻⁹)

Think about

- ICE chart (x's)

- [H₃O⁺]

- convert to pH

3. What is [OH⁻] in a solution of [HCl] is 3.3 x 10⁻⁴

$$K_w = [\text{H}^{+}][\text{OH}^{-}] = 1 \times 10^{-14}$$

Strong

