

BASIC CONCEPTS OF CHEMISTRY

Chapter 14

Oxidation-Reduction Reactions

Objectives:

- * Using oxidation states, determine the species oxidized, the species reduced, the oxidizing agent, and the reducing agent in an electron exchange reaction
- * Balance redox reactions by the oxidation state (bridge) method
- * Balance redox reactions by the ion-electron (half-reaction) method in both acidic and basic media
- * Using a table of relative strengths of oxidizing agents, determine whether a specific redox reaction is spontaneous
- * Describe the structure and electricity generating ability of voltaic cells and batteries
- * Write the reactions that occur when a salt is electrolyzed