**Electrochemistry Notes**

**Vocabulary**

**Electrochemistry**: the study of the interchange of chemical and electrical energy

**Redox reaction**: a transfer of electrons from the reducing agent to the oxidizing agent

**Oxidation**: a loss of electrons (an increase in the oxidation number)

**Reduction**: a gain of electrons (a decrease in the oxidation number)

**Half-reactions**: a redox reaction broken in to two parts, one half with the oxidation and the other

half with the reduction

**Salt bridge**: the connection between the two solutions

**Galvanic cell**: device in which chemical energy is changed to electrical energy

**Anode**: the electrode at which oxidation occurs (an-ox)

**Cathode**: the electrode at which reduction occurs (red-cat)

**Volt**: the unit of electrical potential (J/C)

**Glass electrode**: contains a reference solution of dilute hydrochloric acid in contact with a thin

glass membrane

**Lead storage battery**: lead serves as the anode and lead coated with lead dioxide serves as the cathode

**Electrolytic cell:** an apparatus that uses electrical energy to produce chemical change for

nonspontaneous cells

**Electrolysis**: forcing a current through a cell to produce a chemical change ; used for

nonpontaneous cells

**Ampere**: measure of current in coulombs per second (C/s). Often used to help convert the

number of electrons flowing (current) to the rate of reaction in time