**Electrical conductivity** the ability to conduct an electric current

**Electrochemistry** the study of the interchange of chemical and electric current

**Electrolysis** a process that involves forcing a current through a cell to cause

nonspontaneous chemical reaction to occur

**Electrolyte** a material that dissolves in water to give a solution that conducts an

electric current

**Electrolytic cell** a cell that uses electrical energy to produce a chemical change

that would not otherwise occur

**Electromagnetic radiation** radiant energy that exhibits wave – like behavior

and travels through space at the seed of light in a vacuum

**Electron** a negatively charged particle that occupies the space around the

nucleus of an atom

**Electronegativity** the tendency of an atom in a molecule to attract shared

electrons to itself

**Element** a substance that cannot be decomposed into simpler substances by

chemical or physical means. It consists of atoms all having the same atomic number

**Empirical formula**  the simplest whole – number ratio of atoms in a compound

**End point** the point in a titration at which the indicator changes color

**Endothermic** refers to a reaction in which energy (as heat) flows into the

system

**Energy** the capacity to do work or to cause the flow of heat

**Enthalpy** at constant pressure, the change in enthalpy equals the energy flow

as heat

**Enzyme** a large molecule, usually a protein, that catalyzes biological reactions

**Equilibrium constant** the value obtained when equilibrium concentrations of

the chemical species are substituted into the equilibrium expression

**Equilibrium expression** the expression (from the law of mass action) equal to

the product of the product concentrations divided by the product of the reactant concentrations, each concentration having first been raised to a power represented by the coefficient in the balanced equation

**Equilibrium position** a particular set of equilibrium concentrations

**Equivalence point (stoichiometric point)** the point in a titration when enough

titrant has been added to react exactly with the substance in solution that is being titrated

**Essential elements** the elements known to be essential to human life

**Ester** an organic compound produced by the reaction between a carboxylic acid

and an alcohol

**Exothermic** refers to a reaction in which energy (as heat) flows out of the

system

**Exponential notation** expresses a number in the form *N* x 10*M*; a convenient

method for representing a very large or very small number and for easily indicating the number of significant figures