

Chemistry – Chapter 1 Study Guide

Section	Objectives	Key Terms/Ideas
1-1	Define <i>chemistry</i> . List examples of the branches of chemistry. Compare and contrast basic research, applied research, and technological development.	Chemistry Organic chemistry Inorganic chemistry Physical chemistry Analytical chemistry Biochemistry Theoretical chemistry Chemical
1-2	Distinguish between the physical properties and chemical properties of matter Classify changes of matter as physical or chemical. Explain the gas, liquid, and solid states in terms of particles. Distinguish between a mixture and a pure substance. Distinguish between heterogeneous and homogenous mixtures	Mass Matter Atom Element Compound Extensive properties Intensive properties Physical property Physical change Change of state Solid Liquid Gas Chemical property Chemical change (reaction) Law of conservation of energy/mass Mixture Homogeneous/Heterogeneous Pure substance Element/Compound
1-3	Use a periodic table to name elements, given their symbols. Use a periodic table to write the symbols of elements, given their names. Describe the arrangement of the periodic table. List the characteristics that distinguish metals, nonmetals, and metalloids.	Groups/Families Periods Metal Malleability/Ductility Luster Nonmetal Metalloid Noble gases