

UNIT 1: ATOMIC STRUCTURE AND PROPERTIES	UNIT 2: MOLECULAR AND IONIC COMPOUND STRUCTURE AND PROPERTIES	UNIT 3: INTERMOLECULAR FORCES AND PROPERTIES	UNIT 4: CHEMICAL REACTIONS
<p><b>1.1</b> Moles and Molar Mass</p> <p><b>1.2</b> Mass Spectroscopy of Elements</p> <p><b>1.3</b> Elemental Composition of Pure Substances</p> <p><b>1.4</b> Composition of Mixtures</p> <p><b>1.5</b> Atomic Structure and Electron Configuration</p> <p><b>1.6</b> Photoelectron Spectroscopy</p> <p><b>1.7</b> Periodic Trends</p> <p><b>1.8</b> Valence Electrons and Ionic Compounds</p>	<p><b>2.1</b> Types of Chemical Bonds</p> <p><b>2.2</b> Intramolecular Force and Potential Energy</p> <p><b>2.3</b> Structure of Ionic Solids</p> <p><b>2.4</b> Structure of Metals and Alloys</p> <p><b>2.5</b> Lewis Diagrams</p> <p><b>2.6</b> Resonance and Formal Charge</p> <p><b>2.7</b> VSEPR and Bond Hybridization</p>	<p><b>3.1</b> Intermolecular Forces</p> <p><b>3.2</b> Properties of Solids</p> <p><b>3.3</b> Solids, Liquids, and Gases</p> <p><b>3.4</b> Ideal Gas Law</p> <p><b>3.5</b> Kinetic Molecular Theory</p> <p><b>3.6</b> Deviation from Ideal Gas Law</p> <p><b>3.7</b> Solutions and Mixtures</p> <p><b>3.8</b> Representations of Solutions</p> <p><b>3.9</b> Separation of Solutions and Mixtures Chromatography</p> <p><b>3.10</b> Solubility</p> <p><b>3.11</b> Spectroscopy and the Electromagnetic Spectrum</p> <p><b>3.12</b> Photoelectric Effect</p> <p><b>3.13</b> Beer-Lambert Law</p>	<p><b>4.1</b> Introduction for Reactions</p> <p><b>4.2</b> Net Ionic Equations</p> <p><b>4.3</b> Representations of</p> <p><b>4.4</b> Physical and Chemical Changes</p> <p><b>4.5</b> Stoichiometry</p> <p><b>4.6</b> Introduction to Titration</p> <p><b>4.7</b> Types of Chemical Reactions 1</p> <p><b>4.8</b> Introduction to Acid-Base Reactions</p> <p><b>4.9</b> Oxidation-Reduction (Redox) Reactions</p>

UNIT 5: KINETICS	UNIT 6: THERMODYNAMICS	UNIT 7: EQUILIBRIUM
<p><b>5.1</b> Reaction Rates</p> <p><b>5.2</b> Introduction to Rate Law</p> <p><b>5.3</b> Concentration Changes Over Time</p> <p><b>5.4</b> Elementary Reactions</p> <p><b>5.5</b> Collision Model</p> <p><b>5.6</b> Reaction Energy Profile</p> <p><b>5.7</b> Introduction to Reaction Mechanisms</p> <p><b>5.8</b> Reaction Mechanism and Rate Law</p> <p><b>5.9</b> Steady-State Approximation</p> <p><b>5.10</b> Multistep Reaction Energy Profile</p> <p><b>5.11</b> Catalysis</p>	<p><b>6.1</b> Endothermic and Exothermic Processes</p> <p><b>6.2</b> Energy Diagrams</p> <p><b>6.3</b> Heat Transfer and Thermal Equilibrium</p> <p><b>6.4</b> Heat Capacity and Calorimetry</p> <p><b>6.5</b> Energy of Phase Changes</p> <p><b>6.6</b> Introduction to Enthalpy of Reaction</p> <p><b>6.7</b> Bond Enthalpies</p> <p><b>6.8</b> Enthalpy of Formation</p> <p><b>6.9</b> Hess's Law</p>	<p><b>7.1</b> Introduction to Equilibrium</p> <p><b>7.2</b> Direction of Reversible</p> <p><b>7.3</b> Reaction Quotient and Equilibrium Constant</p> <p><b>7.4</b> Calculating the Equilibrium Constant</p> <p><b>7.5</b> Magnitude of the Equilibrium Constant</p> <p><b>7.6</b> Properties of the Equilibrium Constant</p> <p><b>7.7</b> Calculating Equilibrium Concentrations</p> <p><b>7.8</b> Representations of Equilibrium</p> <p><b>7.9</b> Introduction to Le Châtelier's Principle</p> <p><b>7.10</b> Reaction Quotient and Le Châtelier's Principle</p> <p><b>7.11</b> Introduction to Solubility Equilibria 5</p> <p><b>7.12</b> Common-Ion Effect</p> <p><b>7.13</b> pH and Solubility</p> <p><b>7.14</b> Free Energy of Dissolution</p>