

LYNN ENGLISH HIGH SCHOOL SCIENCE DEPARTMENT  
AP BIOLOGY CURRICULUM

STANDARDS/TOPIC	LEARNING OBJECTIVES	RESOURCES	ASSESSMENT
<p style="text-align: center;"><i>AP TOPIC/CONTENT</i></p> <p><b>I. Molecules and Cells</b>  <b>A. Chemistry of Life</b></p> <ul style="list-style-type: none"> <li>• Atoms &amp; Molecules</li> <li>• Elements &amp; Compounds</li> </ul> <p><b>MASSACHUSETTS STANDARDS</b>  <b>1. The Chemistry of Life</b></p> <p><i>Broad Concept:</i> Chemical elements form organic molecules that interact to perform the basic functions of life.</p> <p style="text-align: center;"><b>1.1</b></p> <p style="text-align: center;"><b>BASIC CHEMISTRY</b></p> <ul style="list-style-type: none"> <li>• Recognize that biological organisms are composed primarily of very few elements.</li> <li>• The six most common are C, H, N, O, P, S.</li> </ul>	<p><b>Students will be able to:</b></p> <ol style="list-style-type: none"> <li>1. <b>Define</b> <i>element, atom, compound, and molecule.</i></li> <li>2. <b>Draw</b> a model of the structure of an atom.</li> <li>3. <b>Explain</b> how an elements properties depend on the structure of its atom..</li> <li>4. <b>Explain</b> how chemical bonding between atoms is dependent on formation and function of molecules.</li> <li>5. <b>Contrast</b> ionic and covalent bonds.</li> <li>6. <b>Describe</b> weak bonds and Van der Waals interactions.</li> <li>7. <b>Explain</b> how chemical reactions make and break chemical bonds.</li> </ol>	<p><b>TEXT:</b> <u><i>Biology, Seventh Edition, by Campbell and Reece</i></u></p> <p><b>Reading:</b> Chapter 2: Chemical Context of Life</p> <p><b>Lecture Notes:</b>  <a href="#">Chapter 2 Notes.</a>  <a href="#">Chemistry PPT</a>  <a href="#">Periodic Table of Elements.</a></p> <p><b>Labs/Activities</b>            Making Models            Adopt an Element</p> <p><b>Homework:</b></p> <ul style="list-style-type: none"> <li>• Concept Checks</li> <li>• Testing Your Knowledge</li> </ul>	<p>Chapter 2 Assessment</p> <p>Collins: pH</p> <p>AP Lab report</p> <p>Lab rubric</p> <p>Homework Rubric</p> <p>School Wide Rubric</p>