

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