

**1.Making Connections**

**AP Bio Standard: SP7:Connect and relate knowledge across various scales, concepts and representations in/across domains; &(SP2; SP5)**

<b>Score 4.0</b>	<b>In addition to Score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. This may include when students:</b>	
	<b>Score 3.5</b>	In addition to score 3.0 performance, partial success at score 4.0 content
<b>Score 3.0</b>	<b>The student will:</b> <ul style="list-style-type: none"> <li>• <b>Identify the 11 levels of organization</b></li> <li>• <b>Explain the 3 unifying principals of all living things</b></li> <li>• <b>Compare and contrast prokaryotic and eukaryotic cells</b></li> <li>• <b>Explain the 8 taxonomic levels and scientific naming</b></li> <li>• <b>SS4: statistical analysis- standard deviation, standard error of the mean, null hypothesis</b></li> </ul> <b>The student exhibits no major errors or omissions.</b>	
		No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content
<b>Score 2.0</b>	The student will recognize or recall specific vocabulary, such as: <ul style="list-style-type: none"> <li>• Cell, prokaryotic, eukaryotic, producers, consumers, homeostasis, taxonomy, inheritance, null hypothesis, mode, median, mean, range, standard deviation, standard error of the mean</li> </ul> The student will: <ul style="list-style-type: none"> <li>• Calculate mean, median, mode, range</li> <li>• Complete metric conversions</li> </ul> The student partially explains content within score 3.0 however, there are major errors omissions	
		In addition to score 1.0 performance, partial success at score 2.0 content
<b>Score 1.0</b>	<b>With help, a partial success at score 2.0 content and score 3.0 content</b>	
<b>Score 0.0</b>	<b>Even with help, no understanding or skill demonstrated.</b>	

**2.Chemistry of Life**

*AP Bio Standard: 2.A.3 (& Math skill)*

<b>Score 4.0</b>	<b>In addition to Score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. This may include when students:</b>
<b>Score 3.5</b>	In addition to score 3.0 performance, partial success at score 4.0 content
<b>Score 3.0</b>	<p><b>The student will:</b></p> <ul style="list-style-type: none"> <li>• <b>Explain how isotopes function in biology</b></li> <li>• <b>Describe properties of chemical bonding- ionic, covalent, polar vs nonpolar, hydrogen bonding</b></li> <li>• <b>Explain how organisms must exchange matter (CHNOPS) with the environment to grow, reproduce, and maintain organization</b></li> <li>• <b>Explain properties of water due to hydrogen bonding that allow it to be so important to life</b></li> <li>• <b>SS2: pH scale comparisons can be made and understanding of buffers in life processes</b></li> <li>• <b>SS2: Dilution calculations</b></li> </ul> <p style="text-align: right;"><b>The student exhibits no major errors or omissions.</b></p>
	No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content
<b>Score 2.0</b>	<p>The student will recognize or recall specific vocabulary, such as:</p> <ul style="list-style-type: none"> <li>• Isotope, CHNOPS, trace element, polar, hydrogen bond, buffer, adhesion, cohesion, pH scale</li> </ul> <p>The student will:</p> <ul style="list-style-type: none"> <li>• Model water molecules hydrogen bonding</li> </ul> <p>The student partially explains content within score 3.0 however, there are major errors or omissions</p>
	In addition to score 1.0 performance, partial success at score 2.0 content
<b>Score 1.0</b>	<b>With help, a partial success at score 2.0 content and score 3.0 content</b>
<b>Score 0.0</b>	<b>Even with help, no understanding or skill demonstrated.</b>