

**Pine City Junior Senior High School**  
**Career and College Readiness Core Standards**  
**Grade 11-12 Benchmarks**

Course: Biology

Teacher: Adams

<b>Anchor Standard</b>	<b>Benchmark (Informational Text)</b>	<b>Classroom Applications of Standard/Benchmark</b>
<p>1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.</p>	<p>Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.</p>	<p>In science, the text is presenting factual information, what we do is to check for student comprehension of this information; we use the following strategies:</p> <ul style="list-style-type: none"> <li>● Students will perform laboratory experiments. These experiments are designed to demonstrate, or codify the theories and facts students were presented with.</li> <li>● Students will complete directed readings that include a variety of question types (compare/contrast, explain, etc . Students need to support their answers from the information in the text.</li> </ul>
<p>2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.</p>	<p>Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.</p>	<p>The tests we use in science do not contain a central idea or theme; instead, our text consists of chapters with key ideas or topics.</p> <p>A central point in science is the inter-relationship that exists between the chapters in our text and between all sciences in general. The central ideas between chapters is summarized by:</p> <ul style="list-style-type: none"> <li>● Using previously learned information, to support new concepts, theories, or more detailed analysis of basic concepts.</li> <li>● Using previously learned information to anticipate or predict events or outcomes.</li> </ul>
<p>3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.</p>	<p>Analyze the impact of the author's choices regarding how to develop and relate elements of the story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced, and developed).</p>	<p>Scientific ideas do not stand alone, science is cross-disciplinary. This is demonstrated by:</p> <ul style="list-style-type: none"> <li>● The use of chemistry in biology classes, and vice versa.</li> <li>● When we describe an idea or concept we present it in such a manner as to demonstrate how that idea relates to the other sciences, and often to their daily experiences.</li> <li>●</li> </ul>

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<p>4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.</p>	<p>Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of the text. (e.g., how Madison defines faction in <i>Federalist</i> No. 10)</p>	<p>The learning of science requires students to learn an entirely new vocabulary. The new vocabulary is not limited to simple words, it can also include technical meanings. This new vocabulary is presented in a variety of methods, such as:</p> <ul style="list-style-type: none"> <li>● Vocabulary word lists.</li> <li>● Requiring students to use vocabulary words and meanings in technical writings.</li> <li>● Requiring students to understand that there are certain prefixes, suffixes, and roots that are commonly used and that these are often interdisciplinary.</li> </ul>
<p>5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.</p>	<p>Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.</p>	<p>Science texts are arranged in chapter form, with each chapter being divided into a number of sections. These individual sections are interrelated. In science we:</p> <ul style="list-style-type: none"> <li>● Cover each section individually, and show how it relates to previously covered sections.</li> <li>● Use pre-reading strategies, sum-it-up, etc.</li> <li>● We also have students individually read the section and them, the students, explain what concepts the author was attempting to explain.</li> <li>● We also have students work in groups, discussing the section and its implications.</li> </ul>
<p>6. Assess how point of view or purpose shapes the content and style of a text.</p>	<p>Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.</p>	<p>School science texts present well established facts, so this core standard cannot be readily addressed. We do, on occasion, use other resources, magazine articles, movies, etc., to discuss controversial issues. The discussion of these issues is extremely limited so as not to infringe upon the beliefs of individual students or their family.</p>
<p>8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the</p>	<p>Delineate and evaluate the reasoning in seminal U.S. Texts, including the application of constitutional principles</p>	<p>Science texts present information that is considered to be factual in nature. Students are presented this information, however, they are encouraged to question this information. This</p>

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relevance and sufficiency of the evidence.	and use of legal reasoning (e.g., in US Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., <i>The Federalist</i> , presidential address)	is done by: <ul style="list-style-type: none"><li>● Open class discussion. Any fact should be able to stand up to rigorous scrutiny.</li><li>● Information is presented to students in a logical, organized manner, If a student has issues with a particular statement then the teacher must re-present the information in a logical argument.</li><li>● Students are encouraged to question that which they are presented.</li></ul>
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***\*Benchmarks assessed at classroom level only are not included on this graphic organizer.***