

## HOW TO READ A...Delaware Science Literacy Concept Organizer

**The Science Literacy Concept Organizers**, were created to assist teachers in aligning their instruction to the Common Core State Standards. These Science Literacy Concept Organizers are not replacements for teachers' individual units. They are deconstructions of the Common Core State Standards. These Literacy Concept Organizers are a resource from which teachers can select appropriate *Knowledge*, *Understandings*, and *Dos* to develop their own unit(s) of instruction.

**Knowledge:** Refers to information such as vocabulary terms, definitions, and facts that may or may not need explicit instruction, however, are the foundation on which the lesson will be built.

**Understandings:** Refers to the important ideas, principles, and generalizations that allow students to make connections and see patterns and relationships among content. These are the goals of the instruction, outcomes you expect to achieve.

**Dos:** Refers to demonstration of skills. These are the skills that require explicit instruction. By the completion of a lesson/unit, students should have mastered the selected skill(s).

### **GRADE 6-8 Key Ideas and Details**

#### **Reading Standard 1**

#### **For Literacy in Science and Technical Subjects**

College and Career Ready (CCR) Anchor Reading Standard for Literacy in History/Social Studies (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		
CCSS – Grade Level Reading Standard 9 (Literacy in History/Social Studies)		
<b>Grade 6-8:</b> Analyze the relationship between a primary and secondary source on the same topic.	<b>Grade 9-10:</b> Compare and contrast treatments of the same topic in several primary and secondary sources.	<b>Grade 11-12:</b> Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.
KNOW (Factual)	UNDERSTAND (Conceptual)	DO (Procedural & Application)
<ul style="list-style-type: none"> <li>Informational text (science expository/technical texts)</li> <li>How to trace/delineate an author's argument and specific claims</li> <li>Fact</li> <li>Opinion</li> <li>Arguments</li> <li>Sound/logical/justified reasoning</li> <li>Valid vs. invalid claims</li> </ul>	<ul style="list-style-type: none"> <li>Good readers of science and engineering text(s) evaluate the reasons and evidence that authors use to support their arguments and specific claims in informational text(s).</li> </ul>	<ul style="list-style-type: none"> <li>Identify fact</li> <li>Identify opinion</li> <li>Identify reasoned judgments based on scientific research</li> <li>Differentiate between claims which are supported by reasons/evidence and those which are not</li> <li>Differentiate between valid and invalid claims</li> <li>Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.</li> </ul>
Range of Reading and Level of Text Complexity		
CCSS-Grade Specific Standard 10 (Grade 6-8)		
By the end of grade 8, read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently.		
Informational Text-Literary Nonfiction and Historical, Scientific, and Technical Texts		
Includes biographies and autobiographies; books about history, social studies, science, and the arts; technical texts, including directions, forms and information displayed in graphs, charts or maps; and digital sources on a range of topics		

The shaded areas highlight both the College and Career Readiness Anchor Reading Standard Key Ideas and Details and the CCSS for the grade level indicated.

This arrow indicates the CCSS of grade level prior to the grade level you are working. This allows you to see the progression of from grade to grade.

These recursive strategies are the basic reading strategies that students must know and use to become successful readers. Some of the strategies are not explicitly stated in the Common Core State Standards for ELA.

This arrow indicates the CCSS of grade level above the grade level you are working. This allows you to see the progression of from grade to grade.

The Know, Understand and Do columns align to the shaded grade level.

#### Reading Recursive Strategies:

- Assimilating prior knowledge
- Rereading to clarify information
- Seeking meaning of unknown vocabulary
- Making and revising predictions
- Using critical and divergent thinking and assimilating prior knowledge to draw conclusions



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- Making connections and responding to text

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### **GRADE 6-8-Craft and Structure** **Reading Standard 6** **for SCIENCE**

<b>College and Career Ready (CCR) Anchor Reading Standard for Literacy in History/Social Studies (6):</b> Assess how point of view or purpose shapes the content and style of a text.		
<b>CCSS – Grade Level Reading Standard 6 (Literacy in History/Social Studies)</b>		
<b>Grade 6-8: Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.</b>	Grade 9-10: Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.	Grade 11-12: Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.
<b>Know (factual)</b>	<b>Understand (conceptual)</b>	<b>Do (procedural &amp; application)</b>
<ul style="list-style-type: none"> <li>• Informational text (both literary nonfiction and expository/technical texts)</li> <li>• How to analyze</li> <li>• The role and purpose for scientific text(s) (to inform, to persuade, to explain how)</li> <li>• The perspective, viewpoint, focus, attitude and bias of writers of scientific and engineering text(s)</li> <li>• Conflicting evidence or viewpoints</li> <li>• Responses to opposing viewpoints (e.g., acknowledge, concede, rebut)</li> </ul>	<ul style="list-style-type: none"> <li>• Authors in scientific and engineering text(s) achieve their purpose through the choices they make (e.g., acknowledging/responding to viewpoints, word choice, and presentation of data, supporting and conflicting arguments).</li> <li>• Authors in scientific and engineering text(s) distinguish their position, viewpoint, and attitude from that of others based on scientific evidence.</li> <li>• Good readers of scientific and engineering text(s) analyze the text in order to identify the difference between the author's viewpoint, focus, attitude and position from that of others based on scientific evidence.</li> </ul>	<ul style="list-style-type: none"> <li>• Explain the author's overall purpose for writing a text</li> <li>• Explain how the author's choices reflect his/her viewpoint, focus, attitude, position or bias</li> <li>• Identify the author's position in a text</li> <li>• Explain how the author controls what the reader knows in a text</li> <li>• Identify if and how conflicting evidence or viewpoints are addressed in a text</li> <li>• Analyze how the author acknowledges and responds to/ignores conflicting evidence or viewpoints</li> <li>• Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.</li> </ul>
<b>Range of Reading and Level of Text Complexity</b> <b>CCSS-Grade Specific Standard 10 (Grade 6-8)</b> By the end of grade 8, read and comprehend history/social studies texts in the grades 6-8 text complexity band independently and proficiently.		

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