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 <u>not</u> 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)

Grade 6-8: Analyze the relationship between a primary and secondary source on the same topic.

Grade 9-10: Compare and contrast treatments of the same topic in several primary and secondary sources.

Grade 11-12: Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, nothing discrepancies among sources.

KNOW (Factual)

UNDERSTAND (Conceptual)

(Procedural & Application) • Identify fact

- Informational text (science expository/technical texts)
- How to trace/delineate an author's argument and specific claims
- Fact
- Opinion
- Arguments
- Sound/logical/justified reasoning
- Valid vs. invalid claims
- 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).
- Identify opinion
- Identify reasoned judgments based on scientific research
- Differentiate between claims which are supported by reasons/evidence and those which are not
- Differentiate between valid and invalid claims
- Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

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

Reading Recursive Strategies:

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

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

The <u>Know</u>,
<u>Understand</u> and <u>Do</u>
columns align to
the shaded
grade level.

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 prior to the

grade level vou

are working.

This allows you

to see the

progression of

from grade to

grade.

These recursive

strategies are

the basic

reading

strategies that



Delaware Science Literacy Concept Organizer

These **Science Literacy Concept Organizers** are <u>not</u> 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.

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

Reading Recursive Strategies:

- Assimilating prior knowledge
- o 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
- Making connections and responding to text

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.

2



Delaware Science Literacy Concept Organizer

These **Science Literacy Concept Organizers** are <u>not</u> 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.

GRADE 6-8-Craft and Structure <u>Reading Standard 4</u> for Literacy in Science

College and Career Ready (CCR) Anchor Reading Standard for Literacy in History/Social Studies (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.

CCSS – Grade Level Reading Standard 4 (Literacy in History/Social Studies)

Grade 6-8: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.

Grade 9-10: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9-10 texts and topics.

Grade 11-12: Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11-12 texts and topics.

topics.	relevant to <i>grades 9-10 texts</i>	texts and topics.
	and topics.	
Know	Understand	Do
(factual)	(conceptual)	(procedural & application)
 Informational text How to analyze Context clues Literal meaning Technical meaning 	 Writers of science and engineering text(s) make purposeful choices to achieve an intended effect within informational text(s). Good readers of science and engineering text(s) actively seek the meaning of unknown words/phrases to deepen their understanding of informational text(s). 	 Read and reread other sentences, words, table(s), diagram(s) and graph(s) to identify context clues to help unlock the meaning of unknown words/phrases Determine the appropriate definition of words that have more than one meaning Identify and use scientific language Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.

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

Reading Recursive Strategies:

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

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.

3