



**Interact Middle School Library**  
**Grades: 5, 6, 7, 8**  
**States: Common Core State Standards**

Interact Middle School Library: PHOTOSYNTHESIS, FOOD, AND POPULATIONS: A Squared Away Unit  
 Summary: Students examine the role of simple sugars and other materials involved in photosynthesis and oxidation, creating food chains and webs for a fictitious meadow, calculating food-energy budgets for its inhabitants, and predicting population changes in response to food-energy availability.  
 (9781560045953-INT849)

**Common Core State Standards**  
**Language Arts**  
**Grade: 5 - Adopted 2010**

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RI.5</b>    | Reading Standards for Informational Text  |
| <b>CATEGORY / CLUSTER</b> |                                  | Integration of Knowledge and Ideas  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RI.5.7</b>  | Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RI.5.8</b>  | Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RI.5.9</b>  | Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RI.5</b>    | Reading Standards for Informational Text  |
| <b>CATEGORY / CLUSTER</b> |                                  | Range of Reading and Level of Text Complexity   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RI.5.10</b> | By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently. |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RF.5</b>    | Reading Standards: Foundational Skills  |
| <b>CATEGORY / CLUSTER</b> |                                  | Fluency   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RF.5.4</b>  | Read with sufficient accuracy and fluency to support comprehension.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.RF.5.4a</b> | Read on-level text with purpose and understanding.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.5</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.5.2</b>   | Write informative/explanatory texts to examine a topic and convey ideas and information clearly.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.W.5.2b</b>  | Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.5</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Production and Distribution of Writing  |

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| <b>CLUSTER</b>            |                                  |   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.5.4</b>   | Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)        |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.5</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Research to Build and Present Knowledge   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.5.7</b>   | Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.5.8</b>   | Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.              |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.5</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Research to Build and Present Knowledge   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.5.9</b>   | Draw evidence from literary or informational texts to support analysis, reflection, and research.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.W.5.9b</b>  | Apply grade 5 reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]"). |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.5</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Range of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.5.10</b>  | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.SL.5</b>    | Speaking and Listening Standards  |
| <b>CATEGORY / CLUSTER</b> |                                  | Comprehension and Collaboration   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.SL.5.1</b>  | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.      |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.5.1a</b> | Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.                              |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.5.1b</b> | Follow agreed-upon rules for discussions and carry out assigned roles.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.5.1c</b> | Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.   |

**Grade: 6 - Adopted 2010**

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RI.6</b>   | Reading Standards for Informational Text  |
| <b>CATEGORY / CLUSTER</b> |                                 | Integration of Knowledge and Ideas  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RI.6.7</b> | Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue. |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.6</b>    | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                 | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.6.2</b>  | Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.W.6.2b</b> | Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.6</b>    | Writing Standards   |

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| <b>CATEGORY / CLUSTER</b> |                                  | Production and Distribution of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.6.4</b>   | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)                                    |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.6</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Research to Build and Present Knowledge   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.6.7</b>   | Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.6.8</b>   | Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources. |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.6</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Range of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.6.10</b>  | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.                                       |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.SL.6</b>    | Speaking and Listening Standards  |
| <b>CATEGORY / CLUSTER</b> |                                  | Comprehension and Collaboration   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.SL.6.1</b>  | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.                                 |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.6.1a</b> | Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.6.1b</b> | Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.6.1c</b> | Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.SL.6</b>    | Speaking and Listening Standards  |
| <b>CATEGORY / CLUSTER</b> |                                  | Presentation of Knowledge and Ideas   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.SL.6.6</b>  | Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.   |

**Grade: 7 - Adopted 2010**

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RI.7</b>   | Reading Standards for Informational Text   |
| <b>CATEGORY / CLUSTER</b> |                                 | Key Ideas and Details  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RI.7.3</b> | Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events). |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.7</b>    | Writing Standards  |
| <b>CATEGORY / CLUSTER</b> |                                 | Text Types and Purposes  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.7.2</b>  | Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.W.7.2b</b> | Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.7</b>    | Writing Standards  |
| <b>CATEGORY / CLUSTER</b> |                                 | Production and Distribution of Writing   |

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| <b>CLUSTER</b>            |                                  |   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.7.4</b>   | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.7</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Research to Build and Present Knowledge   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.7.7</b>   | Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.7.8</b>   | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.7</b>     | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                  | Range of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.7.10</b>  | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.SL.7</b>    | Speaking and Listening Standards  |
| <b>CATEGORY / CLUSTER</b> |                                  | Comprehension and Collaboration   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.SL.7.1</b>  | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.7.1a</b> | Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.7.1b</b> | Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.7.1c</b> | Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.7.1d</b> | Acknowledge new information expressed by others and, when warranted, modify their own views.  |

**Grade: 8 - Adopted 2010**

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.8</b>    | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                 | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.8.2</b>  | Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.W.8.2b</b> | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.8</b>    | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                 | Production and Distribution of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.8.4</b>  | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)    |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.8</b>    | Writing Standards   |
| <b>CATEGORY / CLUSTER</b> |                                 | Research to Build and Present Knowledge   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.8.7</b>  | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. |

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| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.8.8</b>   | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.W.8</b>     | <b>Writing Standards</b>  |
| <b>CATEGORY / CLUSTER</b> |                                  | Range of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.W.8.10</b>  | Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.SL.8</b>    | <b>Speaking and Listening Standards</b>   |
| <b>CATEGORY / CLUSTER</b> |                                  | Comprehension and Collaboration   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.SL.8.1</b>  | Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.8.1a</b> | Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.8.1b</b> | Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.8.1c</b> | Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.SL.8.1d</b> | Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.  |

### Science

Grade: 6 - Adopted 2010

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Key Ideas and Details  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.2</b> | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.3</b> | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Craft and Structure  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.4</b> | 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. |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.5</b> | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Integration of Knowledge and Ideas   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.7</b> | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).      |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.9</b> | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.                                  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |

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| <b>CATEGORY / CLUSTER</b> |                                      | Range of Reading and Level of Text Complexity   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.10</b>  | By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | Writing Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.1</b>  | Write arguments focused on discipline-specific content.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1a</b> | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1c</b> | Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1d</b> | Establish and maintain a formal style.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1e</b> | Provide a concluding statement or section that follows from and supports the argument presented.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | Writing Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.2</b>  | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2a</b> | Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2b</b> | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2c</b> | Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2d</b> | Use precise language and domain-specific vocabulary to inform about or explain the topic.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2e</b> | Establish and maintain a formal style and objective tone.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2f</b> | Provide a concluding statement or section that follows from and supports the information or explanation presented.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | Writing Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.3</b>  | (See note; not applicable as a separate requirement)  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.3a</b> | Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical |

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|                           |                                      | work that others can replicate them and (possibly) reach the same results.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | <b>Writing Standards for Literacy in Science and Technical Subjects</b>   |
| <b>CATEGORY / CLUSTER</b> |                                      | Production and Distribution of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.4</b>  | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.5</b>  | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.6</b>  | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | <b>Writing Standards for Literacy in Science and Technical Subjects</b>   |
| <b>CATEGORY / CLUSTER</b> |                                      | Research to Build and Present Knowledge   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.7</b>  | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.8</b>  | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.9</b>  | Draw evidence from informational texts to support analysis reflection, and research.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | <b>Writing Standards for Literacy in Science and Technical Subjects</b>   |
| <b>CATEGORY / CLUSTER</b> |                                      | Range of Writing  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.10</b> | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.  |

**Grade: 7 - Adopted 2010**

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Key Ideas and Details  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.2</b> | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.3</b> | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Craft and Structure  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.4</b> | 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. |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.5</b> | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Integration of Knowledge and Ideas   |

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| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.7</b>   | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.9</b>   | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>     | Reading Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Range of Reading and Level of Text Complexity   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.10</b>  | By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | Writing Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.1</b>  | Write arguments focused on discipline-specific content.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1a</b> | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1c</b> | Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1d</b> | Establish and maintain a formal style.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.1e</b> | Provide a concluding statement or section that follows from and supports the argument presented.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | Writing Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Text Types and Purposes   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.2</b>  | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.  |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2a</b> | Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2b</b> | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2c</b> | Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2d</b> | Use precise language and domain-specific vocabulary to inform about or explain the topic.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2e</b> | Establish and maintain a formal style and objective tone.   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.2f</b> | Provide a concluding statement or section that follows from and supports the information or explanation presented.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | Writing Standards for Literacy in Science and Technical Subjects  |
| <b>CATEGORY / CLUSTER</b> |                                      | Text Types and Purposes   |



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| <b>CLUSTER</b>            |                                      |  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.3</b>  | (See note; not applicable as a separate requirement)   |
| <b>EXPECTATION</b>        | <b>CCSS.ELA-Literacy.WHST.6-8.3a</b> | Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | <b>Writing Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                      | Production and Distribution of Writing   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.4</b>  | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.5</b>  | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.6</b>  | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.  |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | <b>Writing Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                      | Research to Build and Present Knowledge  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.7</b>  | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.8</b>  | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.9</b>  | Draw evidence from informational texts to support analysis reflection, and research.   |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.WHST.6-8</b>    | <b>Writing Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                      | Range of Writing   |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.WHST.6-8.10</b> | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.   |

**Grade: 8 - Adopted 2010**

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| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Key Ideas and Details  |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.2</b> | Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. |
| <b>STANDARD</b>           | <b>CCSS.ELA-Literacy.RST.6-8.3</b> | Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.                |
| <b>STRAND / DOMAIN</b>    | <b>CCSS.ELA-Literacy.RST.6-8</b>   | <b>Reading Standards for Literacy in Science and Technical Subjects</b>  |
| <b>CATEGORY / CLUSTER</b> |                                    | Craft and Structure  |
| <b>STANDARD</b>           | <b>CCSS.ELA-</b>                   | Determine the meaning of symbols, key terms, and other domain-specific   |

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|                    | Literacy.RST.6-8.4            | words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.   |
| STANDARD           | CCSS.ELA-Literacy.RST.6-8.5   | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.   |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.RST.6-8     | Reading Standards for Literacy in Science and Technical Subjects  |
| CATEGORY / CLUSTER |                               | Integration of Knowledge and Ideas  |
| STANDARD           | CCSS.ELA-Literacy.RST.6-8.7   | Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).   |
| STANDARD           | CCSS.ELA-Literacy.RST.6-8.9   | Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.   |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.RST.6-8     | Reading Standards for Literacy in Science and Technical Subjects  |
| CATEGORY / CLUSTER |                               | Range of Reading and Level of Text Complexity   |
| STANDARD           | CCSS.ELA-Literacy.RST.6-8.10  | By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.   |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.WHST.6-8    | Writing Standards for Literacy in Science and Technical Subjects  |
| CATEGORY / CLUSTER |                               | Text Types and Purposes   |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.1  | Write arguments focused on discipline-specific content.   |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.1a | Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.   |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.1c | Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.  |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.1d | Establish and maintain a formal style.  |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.1e | Provide a concluding statement or section that follows from and supports the argument presented.  |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.WHST.6-8    | Writing Standards for Literacy in Science and Technical Subjects  |
| CATEGORY / CLUSTER |                               | Text Types and Purposes   |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.2  | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.  |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.2a | Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories as appropriate to achieving purpose; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.2b | Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.   |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.2c | Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.   |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.2d | Use precise language and domain-specific vocabulary to inform about or explain the topic.   |
| EXPECTATION        | CCSS.ELA-                     | Establish and maintain a formal style and objective tone.   |

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|                    | Literacy.WHST.6-8.2e          |  |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.2f | Provide a concluding statement or section that follows from and supports the information or explanation presented.   |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.WHST.6-8    | Writing Standards for Literacy in Science and Technical Subjects   |
| CATEGORY / CLUSTER |                               | Text Types and Purposes  |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.3  | (See note; not applicable as a separate requirement)   |
| EXPECTATION        | CCSS.ELA-Literacy.WHST.6-8.3a | Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.WHST.6-8    | Writing Standards for Literacy in Science and Technical Subjects   |
| CATEGORY / CLUSTER |                               | Production and Distribution of Writing   |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.4  | Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.   |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.5  | With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.   |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.6  | Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.  |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.WHST.6-8    | Writing Standards for Literacy in Science and Technical Subjects   |
| CATEGORY / CLUSTER |                               | Research to Build and Present Knowledge  |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.7  | Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.  |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.8  | Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.  |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.9  | Draw evidence from informational texts to support analysis, reflection, and research.  |
| STRAND / DOMAIN    | CCSS.ELA-Literacy.WHST.6-8    | Writing Standards for Literacy in Science and Technical Subjects   |
| CATEGORY / CLUSTER |                               | Range of Writing   |
| STANDARD           | CCSS.ELA-Literacy.WHST.6-8.10 | Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.   |