

**Correlation of**  
***Seeds of Science/Roots of Reading***<sup>®</sup>  
**Integrated Science and Literacy Units**

**Soil Habitats**  
**Shoreline Science**  
**Designing Mixtures**  
**Gravity and Magnetism**  
**Light Energy**  
**Weather and Water**  
**Variation and Adaptation**  
**Digestion and Body Systems**  
**Planets & Moons**  
**Aquatic Ecosystems**  
**Models of Matter**  
**Chemical Changes**

**with the State of Pennsylvania**  
**English Language Arts Education Standards**  
**for Grade 5**  
**Created August 2009**



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Pennsylvania English/Language Arts Standards – 5<sup>th</sup> Grade

Pennsylvania English/Language Arts Standards – 5 <sup>th</sup> Grade	2 <sup>nd</sup> - 3 <sup>rd</sup> Grade				3 <sup>rd</sup> - 4 <sup>th</sup> Grade				4 <sup>th</sup> - 5 <sup>th</sup> Grade			
	Soil Habitats	Shoreline Science	Designing Mixtures	Gravity & Magnetism	Light Energy	Weather & Water	Variation and Adaptation	Digestion & Body Systems	Planets & Moons	Aquatic Ecosystems	Models of Matter	Chemical
<b>1.1. Learning to Read Independently</b>												
<i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
A. Establish the purpose for reading a type of text (literature, information) before reading.	●●	●●	●●	●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●
B. Select texts for a particular purpose using the format of the text as a guide.	●	●	●	●	●	●	●	●	●●	●●	●●	●
C. Use knowledge of phonics, syllabication, prefixes, suffixes, the dictionary or context clues to decode and understand new words during reading. Use these words accurately in writing and speaking.	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●
D. Identify the basic ideas and facts in text using strategies (e.g., prior knowledge, illustrations and headings) and information from other sources to make predictions about text.	●●	●●	●●	●●	●●●	●●	●●	●●	●●	●●	●●	●
E. Acquire a reading vocabulary by correctly identifying and using words (e.g., synonyms, homophones, homographs, words with roots, suffixes, prefixes). Use a dictionary or related reference.	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●
F. Identify, understand the meaning of and use correctly key vocabulary from various subject	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●

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areas.												
G. Demonstrate after reading understanding and interpretation of both fiction and nonfiction text. <ul style="list-style-type: none"> <li>Summarize the major ideas, themes or procedures of the text.</li> <li>Relate new information or ideas from the text to that learned through additional reading and media (e.g., film, audiotape).</li> <li>Clarify ideas and understandings through rereading and discussion.</li> <li>Make responsible assertions about the ideas from the text by citing evidence.</li> <li>Extend ideas found in the text.</li> </ul>	●	●	●	●	●●	●●	●●	●●	●●	●●	●●	
H. Demonstrate fluency and comprehension in reading. <ul style="list-style-type: none"> <li>Read familiar materials aloud with accuracy.</li> <li>Self-correct mistakes.</li> <li>Use appropriate rhythm, flow, meter and pronunciation.</li> <li>Read a variety of genres and types of text.</li> <li>Demonstrate comprehension (Standard 1.1.5.G.).</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	

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(Recommend: 25 books/year)												
<b>1.2. Reading Critically in All Content Areas</b> <i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
A. Read and understand essential content of informational texts and documents in all academic areas. <ul style="list-style-type: none"> <li>Differentiate fact from opinion across texts.</li> <li>Distinguish between essential and nonessential information across a variety of texts, identifying stereotypes and exaggeration where present.</li> <li>Make inferences about similar concepts in multiple texts and draw conclusions.</li> <li>Evaluate text organization and content to determine the author's purpose and effectiveness.</li> </ul>	●	●	●	●	●●	●●	●●	●●	●●	●●	●●	●
B. Use and understand a variety of media and evaluate the quality of material produced. <ul style="list-style-type: none"> <li>Use a variety of media (e.g., computerized card catalogues, encyclopedias) for research.</li> <li>Evaluate the role of media as a source of both</li> </ul>												

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entertainment and information. <ul style="list-style-type: none"> <li>Use established criteria to design and develop a media project (e.g., script, play, audiotape) for a targeted audience.</li> </ul>												
C. Produce work in at least one literary genre that follows the conventions of the genre.	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●
<b>1.3. Reading, Analyzing and Interpreting Literature</b> <i>Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
A. Read and understand works of literature.												
B. Compare the use of literary elements within and among texts including characters, setting, plot, theme and point of view.												
C. Describe how the author uses literary devices to convey meaning. <ul style="list-style-type: none"> <li>Sound techniques (e.g., rhyme, rhythm, meter, alliteration).</li> <li>Figurative language (e.g., personification, simile, metaphor, hyperbole).</li> </ul>												
D. Identify and respond to the effects of sound and structure in poetry (e.g., alliteration, rhyme, verse form).												

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E. Analyze drama as information source, entertainment, persuasion or transmitter of culture												
F. Read and respond to nonfiction and fiction including poetry and drama.	•	•	•	•	•	•	•	•	•	•	•	•
<b>1.4. Types of Writing</b>												
<i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
A. Write poems, plays and multi-paragraph stories. <ul style="list-style-type: none"> <li>• Include detailed descriptions of people, places and things.</li> <li>• Use relevant illustrations.</li> <li>• Utilize dialogue.</li> <li>• Apply literary conflict.</li> <li>• Include literary elements (Standard 1.3.5.B.).</li> <li>• Use literary devices (Standard 1.3.5.C.).</li> </ul>												
B. Write multi-paragraph informational pieces (e.g., essays, descriptions, letters, reports, instructions). <ul style="list-style-type: none"> <li>• Include cause and effect.</li> <li>• Develop a problem and solution when appropriate to the topic.</li> </ul>	•	•	•	•	••	••	••	••	••	••	••	•

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<ul style="list-style-type: none"> <li>Use relevant graphics (e.g., maps, charts, graphs, tables, illustrations, photographs).</li> </ul>												
C. Write persuasive pieces with a clearly stated position or opinion and supporting detail, citing sources when needed.												
<b>1.5. Quality of Writing</b> <i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
A. Write with a sharp, distinct focus identifying topic, task and audience.	●	●	●	●	●●	●●	●●	●●	●●	●●	●●	●●
B. Write using well-developed content appropriate for the topic. <ul style="list-style-type: none"> <li>Gather, organize and select the most effective information appropriate for the topic, task and audience.</li> <li>Write paragraphs that have a topic sentence and supporting details.</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
C. Write with controlled and/or subtle organization. <ul style="list-style-type: none"> <li>Sustain a logical order within sentences and between paragraphs using meaningful transitions.</li> <li>Include an identifiable introduction, body and</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●

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conclusion.												
D. Write with an understanding of the stylistic aspects of composition. <ul style="list-style-type: none"> <li>Use different types and lengths of sentences.</li> <li>Use precise language including adjectives, adverbs, action verbs and specific details that convey the writer’s meaning.</li> <li>Develop and maintain a consistent voice.</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
E. Revise writing to improve organization and word choice; check the logic, order of ideas and precision of vocabulary.	●	●	●	●	●	●	●	●	●	●	●	●
F. Edit writing using the conventions of language. <ul style="list-style-type: none"> <li>Spell common, frequently used words correctly.</li> <li>Use capital letters correctly.</li> <li>Punctuate correctly (periods, exclamation points, question marks, commas, quotation marks, apostrophes).</li> <li>Use nouns, pronouns, verbs, adjectives, adverbs, conjunctions, prepositions and interjections properly.</li> <li>Use complete sentences (simple, compound, declarative, interrogative, exclamatory and imperative).</li> </ul>	●	●	●	●	●	●	●	●	●	●	●	
G. Present and/or defend written work for publication	●●	●	●	●	●	●	●	●	●	●	●	●

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when appropriate.												
<b>1.6. Speaking and Listening</b> <i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
<b>A. Listen to others.</b> <ul style="list-style-type: none"> <li>Ask pertinent questions.</li> <li>Distinguish relevant information, ideas and opinions from those that are irrelevant.</li> <li>Take notes when prompted.</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
<b>B. Listen to a selection of literature (fiction and/or nonfiction).</b> <ul style="list-style-type: none"> <li>Relate it to what is known.</li> <li>Predict the result of the story actions.</li> <li>Retell actions of the story in sequence, explain the theme and describe the characters and setting.</li> <li>Identify and define new words and concepts.</li> <li>Summarize the selection.</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
<b>C. Speak using skills appropriate to formal speech situations.</b> <ul style="list-style-type: none"> <li>Use complete sentences.</li> <li>Pronounce words correctly.</li> </ul>	●●	●	●	●	●	●	●	●	●	●●	●	●

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<ul style="list-style-type: none"> <li>• Use appropriate volume.</li> <li>• Pace speech so that it is understandable.</li> <li>• Adjust content for different audiences (e.g., fellow classmates, parents).</li> <li>• Speak with a purpose in mind.</li> </ul>												
<p>D. Contribute to discussions.</p> <ul style="list-style-type: none"> <li>• Ask relevant questions.</li> <li>• Respond with relevant information or opinions to questions asked.</li> <li>• Listen to and acknowledge the contributions of others.</li> <li>• Adjust involvement to encourage equitable participation.</li> <li>• Give reasons for opinions.</li> <li>• Summarize, when prompted.</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	
<p>E. Participate in small and large group discussions and presentations.</p> <ul style="list-style-type: none"> <li>• Participate in everyday conversation.</li> <li>• Present an oral reading.</li> <li>• Deliver research reports.</li> <li>• Conduct interviews.</li> <li>• Plan and participate in group presentations.</li> </ul>	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	

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<ul style="list-style-type: none"> <li>Contribute to informal debates.</li> </ul>												
<p>F. Use media for learning purposes.</p> <ul style="list-style-type: none"> <li>Compare information received on television with that received on radio or in newspapers.</li> <li>Access information on Internet.</li> <li>Discuss the reliability of information received on Internet sources.</li> <li>Explain how film can represent either accurate versions or fictional versions of the same event.</li> <li>Explain the role of advertisers in the media.</li> <li>Use a variety of images and sounds to create an effective presentation on a topic.</li> </ul>												
<p><b>1.7. Characteristics and Functions of the English Language</b>  <i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i></p>												
A. Identify words from other languages that are commonly used English words. Use a dictionary to find the meanings and origins of these words.												
B. Identify differences in formal and informal speech (e.g., dialect, slang, jargon).	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●
C. Identify word meanings that have changed over time (e.g., cool, mouse).												

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<b>1.8. Research</b>												
<i>Pennsylvania’s public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to:</i>												
A. Select and refine a topic for research.	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●	●●
A. Locate information using appropriate sources and strategies. <ul style="list-style-type: none"> <li>Evaluate the usefulness and qualities of the sources.</li> <li>Select appropriate sources (e.g., dictionaries, encyclopedias, other reference materials, interviews, observations, computer databases).</li> <li>Use tables of contents, indices, key words, cross-references and appendices.</li> <li>Use traditional and electronic search tools.</li> </ul>	●	●	●	●	●●	●●	●●	●●	●●	●●	●●	●
C. Organize and present the main ideas from research. <ul style="list-style-type: none"> <li>Take notes from sources using a structured format.</li> <li>Present the topic using relevant information.</li> <li>Credit sources using a structured format (e.g., author, title).</li> </ul>	●●	●	●	●	●	●	●	●	●	●	●	●

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