



Cotton Science and Sustainability



Standards for Supplemental Digital Lessons

Next Generation Science Standards*

GRADE 4	Growing Cotton	Farming Science & Technology
4-LS1-1 From Molecules to Organisms: Structures and Processes Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	x	
GRADE 5		
5-LS1-1 From Molecules to Organisms: Structures and Processes Support an argument that plants get the materials they need for growth chiefly from air and water.	x	
GRADE 6		
MS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	x	
GRADE 7		
MS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	x	
GRADE 8		
MS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.	x	

*NGSS Lead States. 2013. *Next Generation Science Standards: For States, By States*. Washington, DC: The National Academies Press.

Common Core English Language Arts Standards**

GRADE 4	Growing Cotton	Farming Science & Technology
<p>Speaking & Listening: Comprehension and Collaboration <u>CCSS.ELA-LITERACY.SL.4.1</u> Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.</p>	x	x
<p>Writing: Text Types and Purposes <u>CCSS.ELA-LITERACY.W.4.2</u> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p>	x	x
<p>Writing: Research to Build and Present Knowledge <u>CCSS.ELA-LITERACY.W.4.8</u> Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.</p>	x	x
<p>Language: Conventions of Standard English <u>CCSS.ELA-LITERACY.L.4.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	x	x
<p><u>CCSS.ELA-LITERACY.L.4.2</u> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>	x	x
<p>Language: Knowledge of Language <u>CCSS.ELA-LITERACY.L.4.3</u> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p>	x	x
<p>Reading Informational Text: Key Ideas and Details <u>CCSS.ELA-LITERACY.RI.4.1</u> Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	x	x
<p>Reading Informational Text: Craft and Structure <u>CCSS.ELA-LITERACY.RI.4.4</u> Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.</p>	x	x
<p>Reading Informational Text: Integration of Knowledge and Ideas <u>CCSS.ELA-LITERACY.RI.4.7</u> Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.</p>		x

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Common Core English Language Arts Standards**

GRADE 5	Growing Cotton	Farming Science & Technology
<p>Speaking & Listening: Comprehension and Collaboration <u>CCSS.ELA-LITERACY.SL.5.1</u> 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.</p>	x	x
<p>Writing: Text Types and Purposes <u>CCSS.ELA-LITERACY.W.5.2</u> Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</p>	x	x
<p>Writing: Research to Build and Present Knowledge <u>CCSS.ELA-LITERACY.W.5.8</u> 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.</p>	x	x
<p>Language: Conventions of Standard English <u>CCSS.ELA-LITERACY.L.5.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	x	x
<p><u>CCSS.ELA-LITERACY.L.5.2</u> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>	x	x
<p>Language: Knowledge of Language <u>CCSS.ELA-LITERACY.L.5.3</u> Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p>	x	x
<p>Reading Informational Text: Key Ideas and Details <u>CCSS.ELA-LITERACY.RI.5.1</u> Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.</p>	x	x
<p>Reading Informational Text: Craft and Structure <u>CCSS.ELA-LITERACY.RI.5.4</u> Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 5 topic or subject area.</p>	x	x
<p>Reading Informational Text: Integration of Knowledge and Ideas <u>CCSS.ELA-LITERACY.RI.5.7</u> 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.</p>		x

Common Core English Language Arts Standards**

GRADE 6	Growing Cotton	Farming Science & Technology
<p>Reading Informational Text: Key Ideas and Details <u>CCSS.ELA-LITERACY.RI.6.1</u> Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	x	x
<p>Reading Informational Text: Integration of Knowledge and Ideas <u>CCSS.ELA-LITERACY.RI.6.7</u> 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.</p>		x
<p>Speaking & Listening: Comprehension and Collaboration <u>CCSS.ELA-LITERACY.SL.6.1</u> 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.</p>	x	x
<p>Language: Conventions of Standard English <u>CCSS.ELA-LITERACY.L.6.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	x	x
<p><u>CCSS.ELA-LITERACY.L.6.2</u> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>	x	x
<p>Writing: Text Types and Purposes <u>CCSS.ELA-LITERACY.W.6.2:</u> Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p>	x	x
<p>Writing: Production and Distribution of Writing <u>CCSS.ELA-LITERACY.W.6.4</u> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	x	x
<p>Writing: Research to Build and Present Knowledge <u>CCSS.ELA-LITERACY.W.6.7</u> Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.</p>		x
<p><u>CCSS.ELA-LITERACY.W.6.8</u> 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.</p>		x
<p><u>CCSS.ELA-LITERACY.W.6.9</u> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p>	x	x

Common Core English Language Arts Standards**

GRADE 7	Growing Cotton	Farming Science & Technology
<p>Reading Informational Text: Key Ideas and Details <u>CCSS.ELA-LITERACY.RI.7.1</u> Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.</p>	x	x
<p>Speaking & Listening: Comprehension and Collaboration <u>CCSS.ELA-LITERACY.SL.7.1</u> 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.</p>	x	x
<p>Language: Conventions of Standard English <u>CCSS.ELA-LITERACY.L.7.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	x	x
<p><u>CCSS.ELA-LITERACY.L.7.2</u> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>	x	x
<p>Writing: Text Types and Purposes <u>CCSS.ELA-LITERACY.W.7.2</u> Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p>	x	x
<p>Writing: Production and Distribution of Writing <u>CCSS.ELA-LITERACY.W.7.4</u> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	x	x
<p>Writing: Research to Build and Present Knowledge <u>CCSS.ELA-LITERACY.W.7.7</u> Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.</p>		x
<p><u>CCSS.ELA-LITERACY.W.7.8</u> 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.</p>		x
<p><u>CCSS.ELA-LITERACY.W.7.9</u> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p>	x	x

Common Core English Language Arts Standards**

GRADE 8	Growing Cotton	Farming Science & Technology
<p>Reading Informational Text: Key Ideas and Details <u>CCSS.ELA-LITERACY.RI.8.1</u> Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.</p>	x	x
<p>Speaking & Listening: Comprehension and Collaboration <u>CCSS.ELA-LITERACY.SL.8.1</u> 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.</p>	x	x
<p>Language: Conventions of Standard English <u>CCSS.ELA-LITERACY.L.8.1</u> Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <u>CCSS.ELA-LITERACY.L.8.2</u> Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>	x	x
<p>Writing: Text Types and Purposes <u>CCSS.ELA-LITERACY.W.8.2</u> Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.</p>	x	x
<p>Writing: Production and Distribution of Writing <u>CCSS.ELA-LITERACY.W.8.4</u> Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	x	x
<p>Writing: Research to Build and Present Knowledge <u>CCSS.ELA-LITERACY.W.8.7</u> 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. <u>CCSS.ELA-LITERACY.W.8.8</u> 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.</p>		x
<p><u>CCSS.ELA-LITERACY.W.8.9</u> Draw evidence from literary or informational texts to support analysis, reflection, and research.</p>	x	x

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