

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
from <i>Journals</i>	Thoreau, Henry David	<b>CCSS.ELA-Literacy.RI.9-10.6</b> Determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.A:</b> Natural Resources	Stability and Change
from <i>Walden; or, Life in the Woods</i>	Thoreau, Henry David	<b>CCSS.ELA-Literacy.RI.11-12.2</b> Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	<b>HS-ETS1-1</b> Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. <b>HS-ETS1-3</b> Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
from <i>Huckleberries</i>	Thoreau, Henry David	<b>CCSS.ELA-Literacy.RH.11-12.2</b> Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among key details and ideas.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>ETS1.B:</b> Developing Possible Solutions	Scale, Proportion, and Quantity
from <i>Letters and Notes on the Manners, Customs, and Condition of the North American Indians</i>	Catlin, George	<b>CCSS.ELA-Literacy.RI.11-12.7</b> Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Cause and Effect
“Fallen Forests”	Sigourney, Lydia Huntley	<b>CCSS.ELA-Literacy.RL.9-10.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Stability and Change
from <i>Rural Hours</i>	Cooper, Susan Fenimore	<b>CCSS.ELA-Literacy.RI.9-10.3</b> Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
from <i>Table Rock Album</i>	Various	<b>CCSS.ELA-Literacy.RH.9-10.6</b> Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-6</b> Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.	<b>ESS3.A:</b> Natural Resources	Systems and System Models
from <i>Leaves of Grass</i>	Whitman, Walt	<b>CCSS.ELA-Literacy.RL.11-12.2</b> Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Scale, Proportion, and Quantity

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from <i>Man and Nature</i>	Marsh, George Perkins	<b>CCSS.ELA-Literacy.RI.9-10.4</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Cause and Effect
from <i>Man and Nature</i>	Marsh, George Perkins	<b>CCSS.ELA-Literacy.RI.9-10.8</b> Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Cause and Effect
from <i>The Humbugs of the World</i>	Barnum, P.T.	<b>CCSS.ELA-Literacy.RH.9-10.8</b> Assess the extent to which the reasoning and evidence in the text support the author's claims.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
from <i>A Thousand-Mile Walk to the Gulf</i>	Muir, John	<b>CCSS.ELA-Literacy.RI.11-12.4</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines <i>faction</i> in <i>Federalist</i> No. 10).	<b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS2.D:</b> Social Interactions and Group Behavior	Cause and Effect
from <i>A Thousand-Mile Walk to the Gulf</i>	Muir, John	<b>CCSS.ELA-Literacy.RH.9-10.5</b> Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.	<b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS2.D:</b> Social Interactions and Group Behavior	Cause and Effect
"A Wind-Storm in the Forests"	Muir, John	<b>CCSS.ELA-Literacy.RST.9-10.6</b> 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.	<b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
from <i>My First Summer in the Sierra</i>	Muir, John	<b>CCSS.ELA-Literacy.RI.9-10.2</b> Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change

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"Hetch Hetchy Valley"	Muir, John	<b>CCSS.ELA-Literacy.RI.11-12.6</b> Determine the author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how the style and content contribute to the power, persuasiveness, or beauty of the text.	<b>HS-ESS2-1</b> Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. <b>HS-ESS2-2</b> Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.	<b>ESS2.A:</b> Earth Materials and Systems	Influence of Science, Engineering, and Technology on the Natural World
from <i>Adventures in the Wilderness</i>	Murray, W. H. H.	<b>CCSS.ELA-Literacy.RH.9-10.1</b> Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.	<b>HS-ESS3-1</b> Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.	<b>ESS3.A:</b> Natural Resources	Science Is a Human Endeavor
from <i>A Review of Recent Changes, and Changes Which Have Been Projected, in the Plans of the Central Park</i>	Olmsted, Frederick Law	<b>CCSS.ELA-Literacy.RI.11-12.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	<b>HS-ETS1-1</b> Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. <b>HS-ETS1-3</b> Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
"About Trees"	Morton, J. Sterling	<b>CCSS.ELA-Literacy.RI.9-10.5</b> Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of the text (e.g., a section or chapter).	<b>HS-LS1-3</b> Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. <b>HS-LS1-5</b> Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy.	<b>LS1.C:</b> Organization for Matter and Energy Flow in Organisms	Stability and Change
To Frank Michler Chapman	Roosevelt, Theodore	<b>CCSS.ELA-Literacy.RH.11-12.1</b> Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change
To John Borroughs	Roosevelt, Theodore	<b>CCSS.ELA-Literacy.RH.9-10.10</b> By the end of Grade 10, read and comprehend history/social studies texts in the grades 9–10 complexity band independently and proficiently.	<b>HS-ESS2-7</b> Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
Speech at Grand Canyon, Arizona, May 6, 1903	Roosevelt, Theodore	<b>CCSS.ELA-Literacy.RH.9-10.4</b> Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
"The Scavengers"	Austin, Mary	<b>CCSS.ELA-Literacy.RST.9-10.2</b> Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Scale, Proportion, and Quantity

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from <i>Man and Earth</i>	Shaler, Nathaniel Southgate	<b>CCSS.ELA-Literacy.RST.9-10.8</b> Assess the extent to which the reasoning and evidence in a text support the author’s claim or a recommendation for solving a scientific or technical problem.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.	<b>ESS3.A:</b> Natural Resources	Science Addresses Questions About the Natural and Material World
“The Art of Seeing Things”	Burroughs, John	<b>CCSS.ELA-Literacy.RH.11-12.2</b> Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among key details and ideas.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Is a Human Endeavor
“The Grist of the Gods”	Burroughs, John	<b>CCSS.ELA-Literacy.RST.11-12.2</b> Determine the central idea or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	<b>HS-ESS2-1</b> Develop a model to illustrate how Earth’s internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. <b>HS-ESS2-2</b> Analyze geoscience data to make the claim that one change to Earth’s surface can create feedbacks that cause changes to other Earth systems.	<b>ESS2.A:</b> Earth Materials and Systems	Stability and Change
“Nature Near Home”	Burroughs, John	<b>CCSS.ELA-Literacy.RST.9-10.1</b> Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	<b>HS-LS3-2</b> Make and defend a claim based on evidence that inheritable generic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors. <b>HS-LS3-3</b> Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.	<b>LS3.B:</b> Variation of Traits	Science Is a Human Endeavor
“Prosperity”	Pinchot, Gifford	<b>CCSS.ELA-Literacy.RST.9-10.5</b> Analyze the structure of the relationships among concepts in the text, including relationships among key terms (e.g., <i>force, friction, reaction force, energy</i> ).	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.A:</b> Natural Resources	Influence of Science, Engineering, and Technology on the Natural World
“The Bird Tragedy on Laysan Island”	Hornaday, William T.	<b>CCSS.ELA-Literacy.RI.11-12.5</b> Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-L2-8</b> Evaluate the evidence for the role of group behavior on individual and species’ chance to survive and reproduce.	<b>LS4.D:</b> Biodiversity and Humans	Cause and Effect
“A Certain Oil Refinery”	Dreiser, Theodore	<b>CCSS.ELA-Literacy.RH.11-12.5</b> Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.A:</b> Natural Resources	Influence of Science, Engineering, and Technology on the Natural World
“The Last Passenger Pigeon”	Stratton-Porter, Gene	<b>CCSS.ELA-Literacy.RH.11-12.8</b> Evaluate an author’s premises, claims, and evidence by corroborating or challenging them with other information.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-L2-8</b> Evaluate the evidence for the role of group behavior on individual and species’ chance to survive and reproduce.	<b>LS4.D:</b> Biodiversity and Humans	Cause and Effect
“The Last Passenger Pigeon”	Stratton-Porter, Gene	<b>CCSS.ELA-Literacy.11-12.7</b> Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-L2-8</b> Evaluate the evidence for the role of group behavior on individual and species’ chance to survive and reproduce.	<b>LS4.D:</b> Biodiversity and Humans	Cause and Effect

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"Orion Rises on the Dunes"	Beston, Henry	<b>CCSS.ELA-Literacy.RI.11-12.3</b> Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact over the course of the text.	<b>HS-ESS1-2</b> Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. <b>HS-ESS1-3</b> Communicate scientific ideas about the way stars, over their life cycle, produce elements.	<b>ESS1.A:</b> The Universe and Its Stars	Scientific Knowledge Assumes an Order and Consistency in Natural Systems
"The Indigenous and the Metropolitan"	McKaye, Benton	<b>CCSS.ELA-Literacy.RH.11-12.4</b> Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines <i>faction</i> in <i>Federalist</i> No. 10).	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"What a Few More Seasons Will Do to the Ducks"	Darling, J. N. "Ding"	<b>CCSS.ELA-Literacy.11-12.7</b> Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-L2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chance to survive and reproduce.	<b>LS4.D:</b> Biodiversity and Humans	Cause and Effect
from <i>Wintertrip into a New Country</i>	Marshall, Robert	<b>CCSS.ELA-Literacy.RI.9-10.10</b> By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently.	<b>HS-ESS2-1</b> Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. <b>HS-ESS2-5</b> Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.	<b>ESS2.B:</b> Plate Tectonics and Large-Scale System Interactions	Structure and Function
"what the ants are saying"	Marquis, Don	<b>CCSS.ELA-Literacy.RL.11-12.6</b> Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).	<b>HS-ESS2-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS2-7</b> Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.	<b>ESS2.E:</b> Biogeology	Influence of Science, Engineering, and Technology on the Natural World
"Letter from the Dust Bowl"	Henderson, Caroline	<b>CCSS.ELA-Literacy.RH.9-10.2</b> Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.	<b>HS-ESS3-1</b> Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-5</b> Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.	<b>ESS3.B:</b> Natural Hazards	Stability and Change
"Birds that Are New Yorkers"	Peattie, Donald Culross	<b>CCSS.ELA-Literacy.RI.11-12.10</b> By the end of grade 11, read and comprehend literary nonfiction in the grades 11-CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11-CCR text complexity band independently and proficiently.	<b>HS-LS3-2</b> Make and defend a claim based on evidence that inheritable generic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors. <b>HS-LS3-3</b> Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.	<b>LS3.B:</b> Variation of Traits	Cause and Effect

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"The Answer"	Jeffers, Robinson	<b>CCSS.ELA-Literacy.RL.9-10.2</b> Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Addresses Questions About the Natural and Material World
"Carmel Point"	Jeffers, Robinson	<b>CCSS.ELA-Literacy.RL.11-12.10</b> By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11-CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11-CCR text complexity band independently and proficiently.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Addresses Questions About the Natural and Material World
from <i>The Grapes of Wrath</i>	Steinbeck, John	<b>CCSS.ELA-Literacy.RL.11-12.3</b> Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).	<b>HS-ESS3-1</b> Construct an explanation based on evidence for how the availability on natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.	<b>ESS3.B:</b> Natural Hazards	Cause and Effect
"This Land Is Your Land"	Guthrie, Woody	<b>CCSS.ELA-Literacy.RL.11-12.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	<b>HS-ESS2-5</b> Plan and conduct an investigation of the properties of water and its effects of Earth materials and processes. <b>HS-ESS2-7</b> Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.	<b>ESS2.E:</b> Biogeology	Structure and Function
from <i>The Everglades: River of Grass</i>	Douglas, Marjory Stoneman	<b>CCSS.ELA-Literacy.RST.9-10.4</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 9–10 texts and topics.	<b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
from <i>A Sand County Almanac</i>	Leopold, Aldo	<b>CCSS.ELA-Literacy.RST.11-12.6</b> 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>HS-ESS2-7</b> Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.	<b>ESS2.E:</b> Biogeology	Stability and Change
"The Fog"	Roueché, Berton	<b>CCSS.ELA-Literacy.RST.11-12.1</b> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.	<b>HS-ESS2-4</b> Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate. <b>HS-ESS2-6</b> Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.	<b>ESS2.D:</b> Weather and Climate	Cause and Effect
"The Longest Day"	Teale, Edwin Way	<b>CCSS.ELA-Literacy.RI.9-10.2</b> Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change
from "Living the Good Life"	Nearing, Helen and Scott	<b>CCSS.ELA-Literacy.RH.9-10.1</b> Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>ETS1.B:</b> Developing Possible Solutions	Stability and Change

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
"Northern Lights"	Olson, Sigurd F.	<b>CCSS.ELA-Literacy.RI.9-10.7</b> Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.	<b>HS-ESS1-2</b> Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. <b>HS-ESS1-3</b> Communicate scientific ideas about the way stars, over their life cycle, produce elements.	<b>ESS1.A:</b> The Universe and Its Stars	Scientific Knowledge Assumes an Order and Consistency in Natural Systems
"Sootfall and Fallout"	White, E.B.	<b>CCSS.ELA-Literacy.RH.11-12.3</b> Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.	<b>HS-PS1-6</b> Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium. <b>HS-PS1-8</b> Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.	<b>PS1.C:</b> Nuclear Processes	Stability and Change
"How Flowers Changed the World"	Eiseley, Loren	<b>CCSS.ELA-Literacy.RST.9-10.9</b> Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-3</b> Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions. <b>HS-LS2-4</b> Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Energy and Matter
from <i>My Wilderness: The Pacific West</i>	Douglas, William O.	<b>CCSS.ELA-Literacy.RI.9-10.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	<b>HS-ESS1-6</b> Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history.	<b>ESS1.C:</b> The History of Planet Earth	Stability and Change
Dissent in <i>Sierra Club v. Morton</i>	Douglas, William O.	<b>CCSS.ELA-Literacy.RH.9-10.2</b> Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
from <i>The Death and Life of Great American Cities</i>	Jacobs, Jane	<b>CCSS.ELA-Literacy.RH.9-10.3</b> Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among the management of natural resources, the stability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
from <i>Silent Spring</i>	Carson, Rachel	<b>CCSS.ELA-Literacy.RST.11-12.8</b> Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
"The Great Paver"	Baker, Russell	<b>CCSS.ELA-Literacy.RI.11-12.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
"The Great Paver"	Baker, Russell	<b>CCSS.ELA-Literacy.RH.9-10.9</b> Compare and contrast treatments of the same topic in several primary and secondary sources.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
"The Living Canyon"	Porter, Eliot	<b>CCSS.ELA-Literacy.RI.9-10.7</b> Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.	<b>HS-ESS2-7</b> Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth.	<b>ESS2.E:</b> Biogeology	Stability and Change
from <i>the Wilderness Act of 1964</i>	Zahniser, Howard	<b>CCSS.ELA-Literacy.RI.11-12.8</b> Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., <i>The Federalist</i> , presidential addresses).	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>ETS1.B:</b> Developing Possible Solutions	Stability and Change
Remarks at the Signing of the Highway Beautification Act of 1965	Johnson, Lyndon B.	<b>CCSS.ELA-Literacy.RI.9-10.9</b> Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
from <i>The Economics of the Coming Spaceship Earth</i>	Boulding, Kenneth E.	<b>CCSS.ELA-Literacy.RST.11-12.4</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 11–12 texts and topics.	<b>HS-LS2-4</b> Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem.	<b>LS2.B:</b> Cycles of Matter and Energy Transfer in Ecosystems	Energy and Matter
from <i>The Historical Roots of Our Ecological Crisis</i>	White, Lynn Jr.	<b>CCSS.ELA-Literacy.RH.11-12.6</b> Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Addresses Questions About the Natural and Material World
"Polemic: Industrial Tourism and the National Parks"	Abbey, Edward	<b>CCSS.ELA-Literacy.RI.11-12.5</b> Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.	<b>HS-ETS1-1</b> Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. <b>HS-ETS1-3</b> Evaluate a solution to a complex real-world problem based on prioritized criteria	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
"Polemic: Industrial Tourism and the National Parks"	Abbey, Edward	<b>CCSS.ELA-Literacy.RH.9-10.9</b> Compare and contrast treatments of the same topic in several primary and secondary sources.	<b>HS-ETS1-1</b> Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. <b>HS-ETS1-3</b> Evaluate a solution to a complex real-world problem based on prioritized criteria.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
from <i>The Population Bomb</i>	Ehrlich, Paul R.	<b>CCSS.ELA-Literacy.RST.9-10.7</b> Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Scale, Proportion, and Quantity
from <i>The Tragedy of the Commons</i>	Hardin, Garrett	<b>CCSS.ELA-Literacy.RH.9-10.4</b> Determine the meaning of words and phrases as they are used in a text, including vocabulary describing political, social, or economic aspects of history/social studies.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
from <i>Do Androids Dream of Electric Sheep?</i>	Dick, Philip K.	<b>CCSS.ELA-Literacy.RL.9-10.5</b> Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change
"A Sample Day in the Kitchen"	Fletcher, Colin	<b>CCSS.ELA-Literacy.RI.9-10.3</b> Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	<b>HS-ETS1-2</b> Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved by engineering.	<b>ETS1.C:</b> Optimizing the Design Solution	Systems and System Models
"Spaceship Earth"	Fuller, R. Buckminster	<b>CCSS.ELA-Literacy.RST.11-12.5</b> Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	<b>HS-ESS1-2</b> Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. <b>HS-ESS1-4</b> Use mathematical or computational representations to predict the motion of orbiting objects in the solar system.	<b>ESS1.B:</b> Earth and the Solar System	Energy and Matter
Mills College Valedictory Address	Mills, Stephanie	<b>CCSS.ELA-Literacy.RI.9-10.5</b> Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of the text (e.g., a section or chapter).	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chance to survive and reproduce.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Cause and Effect
"Smokey the Bear Sutra"	Snyder, Gary	<b>CCSS.ELA-Literacy.RL.9-10.4</b> Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	<b>HS-ESS2-1</b> Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. <b>HS-ESS2-2</b> Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.	<b>ESS2.A:</b> Earth Materials and Systems	Stability and Change

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"Covers the Ground"	Snyder, Gary	<b>CCSS.ELA-Literacy.RL.9-10.10</b> By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"The Beginning"	Hayes, Denis	<b>CCSS.ELA-Literacy.RI.11-12.2</b> Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
"The Beginning"	Hayes, Denis	<b>CCSS.ELA-Literacy.RH.9-10.9</b> Compare and contrast treatments of the same topic in several primary and secondary sources.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
"Millions Join Earth Day Observances across the Nation"	Lelyveld, Joseph	<b>CCSS.ELA-Literacy.RH.9-10.9</b> Compare and contrast treatments of the same topic in several primary and secondary sources.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
"Big Yellow Taxi"	Mitchell, Joni	<b>CCSS.ELA-Literacy.RL.9-10.2</b> Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"Mercy Mercy Me (The Ecology)"	Gaye, Martin	<b>CCSS.ELA-Literacy.RL.11-12.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
from <i>Encounters with the Archdruid</i>	McPhee, John	<b>CCSS.ELA-Literacy.RI.9-10.8</b> Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World

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from <i>Encounters with the Archdruid</i>	McPhee, John	<b>CCSS.ELA-Literacy.RH.11-12.9</b> Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
from <i>Only One Earth</i>	Friends of the Earth	<b>CCSS.ELA-Literacy.RST.9-10.6</b> 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.	<b>HS-ESS1-6</b> Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth’s formation and early history.	<b>ESS1.C:</b> The History of Planet Earth	Stability and Change
“Manifesto: The Mad Farmer Liberation Front”	Berry, Wendell	<b>CCSS.ELA-Literacy.RL.11-12.5</b> Analyze how an author’s choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Addresses Questions About the Natural and Material World
“The Making of a Marginal Farm”	Berry, Wendell	<b>CCSS.ELA-Literacy.RI.9-10.4</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	<b>HS-ESS3-1</b> Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.A:</b> Natural Resources	Stability and Change
“The Making of a Marginal Farm”	Berry, Wendell	<b>CCSS.ELA-Literacy.RH.9-10.6</b> Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.	<b>HS-ESS3-1</b> Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.A:</b> Natural Resources	Stability and Change
“Preserving Wilderness”	Berry, Wendell	<b>CCSS.ELA-Literacy.RI.11-12.3</b> Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact over the course of the text.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
“Fecundity”	Dillard, Annie	<b>CCSS.ELA-Literacy.RST.9-10.2</b> Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.	<b>HS-LS3-2</b> Make and defend a claim based on evidence that inheritable generic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors. <b>HS-LS3-3</b> Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.	<b>LS3.B:</b> Variation of Traits	Scale, Proportion, and Quantity
“The World’s Biggest Membrane”	Thomas, Lewis	<b>CCSS.ELA-Literacy.RST.9-10.1</b> Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	<b>HS-ESS1-5</b> Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks. <b>HS-ESS1-6</b> Apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth’s formation and early history.	<b>ESS1.C:</b> The History of Planet Earth	Stability and Change

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
"The Third Planet: Operating Instructions"	Brower, David R.	<b>CCSS.ELA-Literacy.RI.11-12.6</b> Determine the author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how the style and content contribute to the power, persuasiveness, or beauty of the text.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. <b>HS-ESS3-5</b> Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Stability and Change
from <i>Energy Strategy: The Road Not Taken</i>	Lovins, Amory B.	<b>CCSS.ELA-Literacy.RST.11-12.7</b> Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.	<b>HS-PS3-3</b> Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.	<b>ETS1.A:</b> Defining and Delimiting an Engineering Problem	Influence of Science, Engineering, and Technology on the Natural World
"A First American Views His Land"	Momaday, N. Scott	<b>CCSS.ELA-Literacy.RL.11-12.5</b> Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Stability and Change
from <i>Ceremony</i>	Silko, Leslie Marmon	<b>CCSS.ELA-Literacy.RL.9-10.3</b> Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"A Short History of America"	Crumb, R.	<b>CCSS.ELA-Literacy.RH.11-12.7</b> Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"Outside the Solar Village: One Utopian Farm"	Jackson, Wes	<b>CCSS.ELA-Literacy.RL.9-10.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	<b>HS-LS2-3</b> Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>ETS1.B:</b> Developing Possible Solutions	Energy and Matter
from <i>Love Canal: My Story</i>	Gibbs, Lois Marie	<b>CCSS.ELA-Literacy.RI.9-10.6</b> Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
from <i>The Fate of the Earth</i>	Schell, Jonathan	<b>CCSS.ELA-Literacy.RST.9-10.8</b> Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
"Seasons of Want and Plenty"	Cronon, William	<b>CCSS.ELA-Literacy.RH.9-10.8</b> Assess the extent to which the reasoning and evidence in the text support the author's claims.	<b>HS-ESS3-1</b> Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.	<b>ESS3.A:</b> Natural Resources	Cause and Effect
"Everything Is a Human Being"	Walker, Alice	<b>CCSS.ELA-Literacy.RI.9-10.6</b> Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	<b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
"Bernhardsdorp"	Wilson, E. O.	<b>CCSS.ELA-Literacy.RST.11-12.2</b> Determine the central idea or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.	<b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Scale, Proportion, and Quantity
Wrath of Grapes Boycott Speech	Chávez, César	<b>CCSS.ELA-Literacy.RI.11-12.6</b> Determine the author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how the style and content contribute to the power, persuasiveness, or beauty of the text.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"A Presentation of Whales"	Lopez, Barry	<b>CCSS.ELA-Literacy.RH.9-10.3</b> Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Is a Human Endeavor
"Place"	Merwin, W. S.	<b>CCSS.ELA-Literacy.RL.11-12.4</b> Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change
from <i>The End of Nature</i>	McKibben, Bill	<b>CCSS.ELA-Literacy.RI.9-10.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	<b>HS-ESS2-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS2-4</b> Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate. <b>HS-ESS2-6</b> Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.	<b>ESS2.D:</b> Weather and Climate	Influence of Science, Engineering, and Technology on the Natural World
from <i>Dumping in Dixie</i>	Bullard, Robert D.	<b>CCSS.ELA-Literacy.RH.9-10.8</b> Assess the extent to which the reasoning and evidence in the text support the author's claims.	<b>HS-ESS2-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Addresses Questions About the Natural and Material World

SELECTION	AUTHOR	ENGLISH LANGUAGE ARTS STANDARDS	NEXT GENERATION SCIENCE STANDARDS	Framework for K–12 Science Education: CORE IDEAS	Framework for K–12 Science Education: CROSSCUTTING CONCEPTS
"The Summer Day"	Oliver, Mary	<b>CCSS.ELA-Literacy.RL.9-10.4</b> Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	<b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change
from <i>Refuge: An Unnatural History of Family and Place</i>	Williams, Terry Tempest	<b>CCSS.ELA-Literacy.RI.11-12.2</b> Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
from <i>The Ninemile Wolves</i>	Bass, Rick	<b>CCSS.ELA-Literacy.RH.11-12.8</b> Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Scale, Proportion, and Quantity
"The Dubious Rewards of Consumption"	During, Alan	<b>CCSS.ELA-Literacy.RST.9-10.7</b> Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World
"After the Flood"	Sanders, Scott Russell	<b>CCSS.ELA-Literacy.RI.11-12.1</b> Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Science Addresses Questions About the Natural and Material World
from <i>The Last Panda</i>	Schaller, George B.	<b>CCSS.ELA-Literacy.RI.9-10.3</b> Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	<b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Stability and Change
"The Flora and Fauna of Las Vegas"	Meloy, Ellen	<b>CCSS.ELA-Literacy.RI.9-10.2</b> Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	<b>HS-ESS2-5</b> Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes.	<b>ESS2.C:</b> The Role of Water in Earth's Systems	Structure and Function

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"Dwellings"	Hogan, Linda	<b>CCSS.ELA-Literacy.RI.11-12.3</b> Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact over the course of the text.	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Cause and Effect
from <i>The Ecology of Magic: "A Personal Introduction to the Inquiry"</i>	Abram, David	<b>CCSS.ELA-Literacy.RI.11-12.4</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines <i>faction</i> in <i>Federalist</i> No. 10).	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS2.A:</b> Interdependent Relationships in Ecosystems	Cause and Effect
"The Song of the White Pelican"	Turner, Jack	<b>CCSS.ELA-Literacy.RI.9-10.5</b> Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of the text (e.g., a section or chapter).	<b>HS-LS2-1</b> Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS4.D:</b> Biodiversity and Humans	Scale, Proportion, and Quantity
"A Multicultural Approach to Ecopsychology"	Anthony, Carl, and Renée Soule	<b>CCSS.ELA-Literacy.RI.9-10.8</b> Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient.	<b>HS-ETS1-1</b> Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. <b>HS-ETS1-3</b> Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts. <b>HS-ETS1-4</b> Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World
Speech at the Kyoto Climate Change Conference	Gore, Al	<b>CCSS.ELA-Literacy.RST.9-10.1</b> Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-5</b> Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems. <b>HS-ESS3-6</b> Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.	<b>ESS3.D:</b> Climate Change	Science Addresses Questions About the Natural and Material World
from <i>Heart and Blood: Living with Deer in America</i>	Nelson, Richard	<b>CCSS.ELA-Literacy.RST.9-10.10</b> By the end of grade 10, read and comprehend science and technical texts in the grades 9–10 text complexity band independently and proficiently.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS4.D:</b> Biodiversity and Humans	Cause and Effect
"Planet of Weeds: Tallying the Losses of Earth's Animals and Plants"	Quammen, David	<b>CCSS.ELA-Literacy.RST.11-12.1</b> Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.	<b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. <b>HS-LS2-8</b> Evaluate the evidence for the role of group behavior on individual and species' chances to survive and reproduce.	<b>LS4.D:</b> Biodiversity and Humans	Cause and Effect

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from <i>Ecology of a Cracker Childhood</i>	Ray, Janisse	<b>CCSS.ELA-Literacy.RST.9-10.1</b> Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	<b>HS-LS2-2</b> Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. <b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem. <b>HS-LS2-7</b> Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.	<b>LS2.C:</b> Ecosystem Dynamics, Functioning, and Resilience	Stability and Change
from <i>The Legacy of Luna</i>	Hill, Julia Butterfly	<b>CCSS.ELA-Literacy.RI.9-10.6</b> Determine an author’s point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
from <i>Inspirations for Sustaining Life on Earth: “Greeting Friends in Their Andean Gardens”</i>	DeWitt, Calvin	<b>CCSS.ELA-Literacy.RH.9-10.6</b> Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
from <i>Inspirations for Sustaining Life on Earth: “Greeting Friends in Their Andean Gardens”</i>	DeWitt, Calvin	<b>CCSS.ELA-Literacy.RH.9-10.1</b> Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
from <i>Having Faith</i>	Steingraber, Sandra	<b>CCSS.ELA-Literacy.RST.9-10.2</b> Determine the central ideas or conclusions of a text; trace the text’s explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. <b>HS-ESS3-5</b> Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems.	<b>LS2.B:</b> Cycles of Matter and Energy Transfer in Ecosystems	Energy and Matter
“Knowing Our Place”	Kingsolver, Barbara	<b>CCSS.ELA-Literacy.RI.11-12.5</b> Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ESS3.C:</b> Human Impacts on Earth Systems	Influence of Science, Engineering, and Technology on the Natural World

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from <i>The Omnivore's Dilemma</i>	Pollan, Michael	<b>CCSS.ELA-Literacy.RI.11-12.6</b> Determine the author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how the style and content contribute to the power, persuasiveness, or beauty of the text.	<b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. <b>HS-LS2-6</b> Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.	<b>LS2.B:</b> Cycles of Matter and Energy Transfer in Ecosystems	Cause and Effect
from <i>Blessed Unrest</i>	Hawken, Paul	<b>CCSS.ELA-Literacy.RI.11-12.7</b> Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Science Addresses Questions About the Natural and Material World
"The Thoreau Problem"	Solnit, Rebecca	<b>CCSS.ELA-Literacy.RI.9-10.4</b> Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	<b>HS-ESS3-2</b> Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios. <b>HS-ESS3-3</b> Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. <b>HS-ESS3-4</b> Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.	<b>ETS1.B:</b> Developing Possible Solutions	Influence of Science, Engineering, and Technology on the Natural World