Introduction

Correlation between National Common Core Standards for English & Language Arts and the North American Association for Environmental Education Guidelines for Excellence in Environmental Education

For the first time in the nation's history, the United States of America has released a common set of national standards (adopted by 46 states) with a singular focus on getting all of America's students prepared to succeed in college and/or their careers.

The key skills articulated in the *Common Core State Standards for English Language Arts* are essential tools required for students to be functionally literate, but they go beyond basic reading and writing skills to include critical thinking, analysis, and synthesis. Specifically, the Kentucky Department of Education recognizes that students must demonstrate independent thought, with the ability to build on others' ideas and articulate their own. Most importantly to the field of environmental education – students are expected to become self-directed learners, able to seek out and use resources including their peers, teachers, and print or digital materials. Practitioners of environmental education in the classroom and in the field seek to engage students in inquiry-based learning that often starts with exploring environmental resources and issues in their own communities.

Also important to the field of environmental education and to the English Language Arts (ELA) standards is the notion that students are "engaged and open-minded – but discerning" in reading and listening, so that they can question an author's or speaker's claims to assess their veracity or soundness in reasoning. Since the ELA standards emphasize preparing students to be college/career ready in an increasingly global community, students are expected to better understand other perspectives and cultures while evaluating multiple points of view critically and constructively. Author John Hug, in his historical "Two Hats" essay, points to the significance of these skills and the role they play in environmental education when he says: "An environmental educator...is any world citizen who uses information and educational processes to help people analyze the merits of the many and varied points of view usually present on a given environmental issue."

Using the environment as a theme for learning ELA skills allows students to achieve proficiency through real-world inquiry. A student writing an essay about a tree or a pond will emerge with a rich and varied description and story, if the student is allowed to experience that tree or pond first-hand. The authenticity of the learning context helps students integrate and understand concepts that may otherwise be abstract.

The lens of environmental education offers a number of connections to *Common Core State Standards for English Language Arts*. The intent of this correlation is to help teachers understand how the *Common Core State Standards for English Language Arts* compare with expectations found in *the North American Association for Environmental Education Standards for Excellence in Learning (K-12).*

Reading

Introduction to the North American Guidelines for Excellence in Environmental Education

The North American Association for Environmental Education (NAAEE) first published *Excellence in Environmental Education: Guidelines for Learning (K-12)* in 1999. It is now in its fourth edition (2010). This set of guidelines is part of a series of documents that includes guidelines for excellence for environmental education programs, materials, early childhood environmental education programs, and the preparation and professional development of environmental educators. The guidelines were produced as part of the National Project for Excellence in Environmental Education, and were prepared and reviewed by thousands of individuals and organizations representing all aspects of environmental education. The National Project on Environmental Education has been funded by the US Environmental Protection Agency through the Environmental Education and Training Partnership, under agreement with NAAEE.

The entire series of Guidelines for Excellence in Environmental Education is available free of charge through the NAAEE Website, at <u>http://eelinked.naaee.net/n/guidelines/topics/National-Project-for-Excellence-in-EE</u>. Printed copies may be ordered from NAAEE at (202) 419-0412.

Common Core Standards for English and Language Arts

READING:

Anchor Standards for Reading (K-12)	NAAEE: Guidelines for Learning (4 th Grade)	NAAEE: Guidelines for Learning (8 th Grade)	NAAEE: Guidelines for Learning (12 th Grade)	Suggestions for Implementation
Key Ideas and Details 1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	 1C. Collecting information – Learners are able to locate and collect information about the environment and environmental topics. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	 Using "classic" texts read for how environmental factors influence plot, characters, conflict, etc From the list of books recommended by the Common Core curriculum resources, select books with environmental themes. Select readings from student magazines such as National Geographic, Time for Kids, Scholastic (current events including weather, climate change, etc)
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment.	1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations.	1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	See above.

3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.	 1A. Questioning – Learners are able to develop questions that help them learn about the environment and do simple investigations. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1A. Questioning – Learners are able to develop, focus, and explain questions that help them learn about the environment and do environmental investigations. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 1A. Questioning – Learners are able to develop, modify, clarify, and explain questions that guide environmental investigations of various types. They understand factors that influence the questions they pose. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	See above. Read in a text about your local community, looking for ways that the local environment may have influenced the community as it developed (i.e. a community near a river may have a strong fishing community or industry; in Louisville, the Portland community developed because of a series of rapids that forced river traffic to portage their boats, hence the name "Portland").
Craft and Structure 4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.	1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment.	1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations.	1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	Use newspapers, science magazines, student magazines, blogs, to explore environmental topics for craft and structure.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the	 1A. Questioning – Learners are able to develop questions that help them learn about the environment and do simple investigations. 1G. Drawing conclusions and developing explanations – 	 1A. Questioning – Learners are able to develop, focus, and explain questions that help them learn about the environment and do environmental investigations. 1G. Drawing conclusions and developing explanations – 	1A. Questioning – Learners are able to develop, modify, clarify, and explain questions that guide environmental investigations of various types. They understand factors that influence the questions they pose.	See #4.

Reading

whole.	Learners can develop simple explanations that address their questions about the environment.	Learners are able to synthesize their observations and findings into coherent explanations.	1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	
6. Assess how point of view or purpose shapes the content and style of a text.	 1A. Questioning – Learners are able to develop questions that help them learn about the environment and do simple investigations. 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1A. Questioning – Learners are able to develop, focus, and explain questions that help them learn about the environment and do environmental investigations. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 1A. Questioning – Learners are able to develop, modify, clarify, and explain questions that guide environmental investigations of various types. They understand factors that influence the questions they pose. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	Use texts with opposing viewpoints on various environmental topics- e.g. energy, forms of energy, energy use, etc.
Integration of Knowledg	ge and Ideas			
7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as	1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the	1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using.	1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources.	Use texts that include environmental topics, pictures, and graphs to help students understand their relevance to the written content.

in words.	 merits of information. 1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. 1F. Working with models and simulations – Learners understand that relationships, patterns, and processes can be represented by models. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 1F. Working with models and simulations – Learners understand many of the uses and limitations of models. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 3.1A.* Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in 	 1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 1F. Working with models and simulations – Learners are able to create, use, and evaluate models to understand environmental phenomena. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.	 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their 	 analytical skills, to investigate environmental issues, beginning in their own community. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial 	Utilize and compare various text types including online and traditional resources (such as articles, blogs, etc.) to evaluate and analyze environmental topics (e.g. should there be zoos?).

	questions about the environment.	3.1A.* Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community.	questions and hypotheses.	
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.	 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 3.1A.* Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	Utilize and compare various text types including online and traditional resources (such as articles, blogs, etc.) to evaluate and analyze environmental topics (e.g. should there be zoos?).
Range of Reading and To	ext Complexity			
10. Read and comprehend complex literary and informational texts independently and	_	_	_	Select texts in which the environment and/or nature plays a major factor (e.g. <i>Keep the Lights Burning Abby, The Grapes of Wrath,</i>

proficiently.		Come on Rain, The Lorax, poetry and
		essays by Wendell Berry, Mary
		Oliver and others).

*If the nature of the reading experience involves an environmental topic or issue, 3.1A would connect to this standard.

WRITING:

Anchor Standards for	NAAEE: Guidelines for Learning	NAAEE: Guidelines for Learning	NAAEE: Guidelines for Learning	Suggestions for Implementation
Writing (K-12)	(4 th Grade)	(8 th Grade)	(12 th Grade)	
Text Types and Purposes	i			
1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	 1C. Collecting information – Learners are able to locate and collect information about the environment and environmental topics. 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 3.1A. Identifying and investigating issues – Learners are able to identify and investigate issues in their local environments and communities. 	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 3.1A. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 3.1A. Identifying and investigating issues – Learners apply their research and analytical skills to investigate 	After exploring your school's campus or outdoor classroom, identify an issue that your school faces relating to the environment (i.e. waste management/recycling/litter, need more trees on campus to cool playground). Next, develop an argument to support your claims. After reading texts with opposing viewpoints on various environmental topics (e.g. energy, forms of energy, energy use, etc.) and utilizing and comparing various text types including online and traditional resources (such as articles, blogs, etc.) to evaluate and analyze environmental topics (e.g. should there be zoos?) write arguments defending a particular viewpoint.

			environmental issues ranging from local issues to those that are regional or global in scope.	
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	 1C. Collecting information – Learners are able to locate and collect information about the environment and environmental topics. 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 3.1A. Identifying and investigating issues – Learners are able to identify and investigate issues in their local environments and communities. 	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 3.1A. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1E. Organizing Information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 3.1A. Identifying and investigating issues – Learners apply their research and analytical skills to investigate 	After researching local environmental issues, write informative/explanatory pieces explaining research results. After reading newspapers, science magazines, student magazines, blogs, and other informational texts to explore environmental topics (animals, native plants and places, invasive species, how animals such as snakes are helpful), write informative/explanatory pieces examining these topics.

4. Produce clear and	1D. Evaluating accuracy and	1D. Evaluating accuracy and	1D. Evaluating accuracy and	Use environmental texts as models
Production and Distribu		developing explanations – Learners are able to synthesize their observations and findings into coherent explanations.	 appropriate to different types of environmental investigations and purposes. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	
	1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics.	Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 1G. Drawing conclusions and	completeness and reliability in a variety of information sources. 1E. Organizing Information – Learners are able to organize and display information in ways	blurring the lines between fiction and science may be confusing to students – i.e., the fictional life of a fish in the pond may be not scientifically accurate and could lead to scientific misconceptions.
	questions. They are familiar with some basic factors to consider in judging the merits of information.	weaknesses and strengths of the information they are using. 1E. Organizing information –	1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate	fictional story about a girl who lives by a pond, using the details gained by experience and incorporating them into the story. CAUTION –
using effective technique, well-chosen details, and well-structured event sequences.	environment and environmental topics. 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their	environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the	environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data.	form. Explore a historical or natural site. Use the details or knowledge gained to create an imagined story. For example, after visiting a pond, a student might be able to write a
3. Write narratives to develop real or imagined experiences or events	1C. Collecting information – Learners are able to locate and collect information about the	1C. Collecting information – Learners are able to locate and collect reliable information about the	1C. Collecting information – Learners are able to locate and collect reliable information for	After conducting a school yard or community issue investigation, write about the experience in narrative
			environmental issues ranging from local issues to those that are regional or global in scope.	

coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	 reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. 	 reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 	 reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1E. Organizing Information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 	of clear and coherent writing. Use a previously investigated environmental topic for a writing prompt.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	_	_	_	Use environmental texts as models of clear and coherent writing. Continue using the previously investigated environmental topic and written work; develop and strengthen the writing piece.
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	2.4D. Technology – Learners understand that technology is an integral part of human existence and culture.	2.4D. Technology – Learners understand the human ability to shape and control the environment as a function of the capacities for creating knowledge and developing new technologies.	2.4D. Technology – Learners are able to examine the social and environmental impacts of various technologies and technological systems.	Use technology to publish, discuss, and share writing on environmental topics (e.g. Microsoft publisher, blogs, Twitter, Photostory, book publishing software, etc.). Continue using the previously investigated environmental topic and written work; publish the writing piece in an online format (i.e. REALEBOOK or PowerPoint format.
Research to Build and Pre	esent Knowledge			
7. Conduct short as well as more sustained research projects based on focused	1A. Questioning – Learners are able to develop questions that help them learn about	1A. Questioning – Learners are able to develop, focus, and explain questions that help them	1A. Questioning – Learners are able to develop, modify, clarify, and explain questions	Evaluate local environmental topics in your community – identify problems and solutions (elementary

Writing

questions, demonstrati	ng the environment and do simple	learn about the environment and do	that guide environmental	– school grounds; middle –
understanding of the	investigations.	environmental investigations.	investigations of various types. They	neighborhood/community; high
subject under	investigationer	on norman and on gallonoi	understand factors that influence the	school – city/county) – for example,
investigation.	1B. Designing Investigations -	1B. Designing Investigations -	questions they pose.	does the school yard provide all the
investigation.	Learners are able to design simple	Learners are able to design		components of habitat for migratory
	investigations.	environmental investigations to	1B. Designing Investigations –	or native species?
	investigationer	answer particular questions—often	Learners know how to design	
	1C. Collecting information –	their own questions.	investigations to answer particular	Explore the interaction between
	Learners are able to locate and		questions about the environment.	humans and the environment (i.e.
	collect information about the	1C. Collecting information –	They are able to develop	litter and water quality; habitat loss
	environment and environmental	Learners are able to locate and	approaches for investigating	due to suburbanization;
	topics.	collect reliable information about the	unfamiliar types of problems and	transportation or industrial sources
		environment or environmental topics	phenomena.	impact air quality).
	1D. Evaluating accuracy and	using a variety of methods and		
	reliability –	sources.	1C. Collecting information –	Use the KY Green and Healthy
	Learners understand the need to use		Learners are able to locate and	Schools program (inventories) to
	reliable information to answer their	1D. Evaluating accuracy and	collect reliable information for	investigate various facets of the
	questions. They are familiar with	reliability –	environmental investigations of many	school environment.
	some basic factors to consider in	Learners are able to judge the	types. They know how to use	
	judging the merits of information.	weaknesses and strengths of the	sophisticated technology to collect	Use resources (texts, articles, online
		information they are using.	information, including computer	materials, etc.) on various
	1E. Organizing information –		programs that access, gather, store,	environmental topics such as:
	Learners are able to describe data	1E. Organizing information –	and display data.	Water quality, greenhouse gases,
	and organize information to search	Learners are able to classify and		recycling programs in your
	for relationships and patterns	order data, and to organize and	1D. Evaluating accuracy and	community, eating locally, GMOs,
	concerning the environment and	display information in ways that help	reliability –	animals, loss of habitats, energy
	environmental topics.	analysis and interpretation.	Learners can apply basic logic and	sources in your community,
			reasoning skills to evaluate	alternative fuels, etc.
	1G. Drawing conclusions and	1G. Drawing conclusions and	completeness and reliability in a	
	developing explanations –	developing explanations –	variety of information sources.	Inventory what plants and animals
	Learners can develop simple	Learners are able to synthesize their		live in your schoolyard; make
	explanations that address their	observations and findings into	1E. Organizing Information –	qualitative and quantitative
	questions about the environment.	coherent explanations.	Learners are able to organize and	observations; (suggesting Resource
			display information in ways	 – F&W Backyard Wildlife Habitat Kit; KGHS Green Spaces category).
	3.1A. Identifying and investigating	3.1A*. Identifying and investigating	appropriate to different types of	NGID Green Spaces category).
	issues –	issues –	environmental investigations and	
	Learners are able to identify and	Learners are able to use primary and	purposes.	
	investigate issues in their local	secondary sources of information,	10 Drowing conclusions and	
	environments and communities.	and apply growing research and	1G. Drawing conclusions and	
		analytical skills, to investigate	developing explanations –	

		environmental issues, beginning in their own community.	Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 3.1A*. Identifying and investigating issues – Learners apply their research and analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope.	
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.	 1C. Collecting information – Learners are able to locate and collect information about the environment and environmental topics. 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 3.1A*. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1E. Organizing Information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 3.1A*. Identifying and investigating issues – Learners apply their research and 	Use resources (texts, articles, online materials, etc.) about various environmental topics such as: Water quality, greenhouse gases, recycling programs in your community, eating locally, GMOs, animals, loss of habitats, energy sources in your community, alternative fuels, etc. Explore how humans impact the environment, using relevant information from multiple sources.

9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	 3.1A*. Identifying and investigating issues – Learners are able to identify and investigate issues in their local environments and communities. 1A.Questioning – Learners are able to develop questions that help them learn about the environment and do simple investigations. 	1A. Questioning – Learners are able to develop, focus, and explain questions that help them learn about the environment and do environmental investigations.	analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope. 1A. Questioning – Learners are able to develop, modify, clarify, and explain questions that guide environmental investigations of various types. They understand factors that influence the	Use resources (texts, articles, online materials, etc.) on various environmental topics such as: Water quality, greenhouse gases, recycling programs in your community, eating locally, GMOs,
	 1C. Collecting information – Learners are able to locate and collect information about the environment and environmental topics. 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 	 questions they pose. 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 	animals, loss of habitats, energy sources in your community, alternative fuels, etc.
Range of Writing				
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a	1C. Collecting information – Learners are able to locate and collect information about the environment and environmental topics.	1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and	1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use	Keep a nature journal. Go outside for regular writing sessions; use the school grounds on

single sitting or a day or two) for a range of tasks, purposes, and audiences.	sources.		a routine bases to explore species diversity; record weather.
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*If the nature of the writing involves an environmental issue, 3.1A would connect to this standard.

LISTENING AND SPEAKING

College and Career Readiness Anchor Standards for Listening and Speaking (K-12)	NAAEE: Guidelines for Learning (4 th Grade)	NAAEE: Guidelines for Learning (8 th Grade)	NAAEE: Guidelines for Learning (12 th Grade)	Suggestions for Implementation
Comprehension and Colla	boration			
1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners understand there are many approaches to resolving issues. 3.1D*. Working with flexibility, creativity, and openness – Learners understand the importance of sharing ideas and hearing other points of view. 3.2A*. Forming and evaluating personal views – Learners are able to examine and express their own views on environmental issues. 	 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners are able to identify and develop action strategies for addressing particular issues. 3.1D*. Working with flexibility, creativity, and openness – Learners are able to consider the assumptions and interpretations that influence the conclusions they and others draw about environmental issues. 3.2A*. Forming and evaluating personal views – Learners are able to identify, justify, and clarify their views on environmental issues and alternative ways to address them. 	 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners are able to identify and propose action strategies that are likely to be effective in particular situations and for particular purposes. 3.1D*. Working with flexibility, creativity, and openness – While environmental issues investigations can bring to the surface deeply held views, learners are able to engage each other in peer review conducted in the spirit of open inquiry. 3.2A*. Forming and evaluating personal views – Learners are able to communicate, evaluate, and justify their own views on environmental issues and alternative ways to address them. 	Engage in discussions around various environmental topics.
2. Integrate and evaluate information presented in diverse media and formats, including visually,	1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer	1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the	1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate	Discuss opposing viewpoints on environmental issues from current and/or local environmental events.

quantitatively, and orally.	 their questions. They are familiar with some basic factors to consider in judging the merits of information. 1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics. 	information they are using. 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation.	completeness and reliability in a variety of information sources. 1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes.	
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.	 1D. Evaluating accuracy and reliability – Learners understand the need to use reliable information to answer their questions. They are familiar with some basic factors to consider in judging the merits of information. 3.1D*. Working with flexibility, creativity, and openness – Learners understand the importance of sharing ideas and hearing other points of view. 	 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 3.1D*. Working with flexibility, creativity, and openness – Learners are able to consider the assumptions and interpretations that influence the conclusions they and others draw about environmental issues. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 3.1D*. Working with flexibility, creativity, and openness – While environmental issues investigations can bring to the surface deeply held views, learners are able to engage each other in peer review conducted in the spirit of open inquiry. 	Evaluate arguments presented from opposing viewpoints on environmental issues from current and/or local environmental events.
Presentation of Knowled	-	l	1	
4. Present information,	1E. Organizing information –	1E. Organizing information –	1E. Organizing information –	
findings, and supporting	Learners are able to describe data	Learners are able to classify and	Learners are able to organize and	
evidence such that	and organize information to search	order data, and to organize and	display information in ways	
listeners can follow the line	for relationships and patterns	display information in ways that help	appropriate to different types of	
of reasoning and the	concerning the environment and	analysis and interpretation.	environmental investigations and	
organization, development,	environmental topics.		purposes.	
and style are appropriate		1G. Drawing conclusions and		
to task, purpose, and	1G. Drawing conclusions and	developing explanations –	1G. Drawing conclusions and	
	developing explanations –	Learners are able to synthesize their	developing explanations –	

audience.	Learners can develop simple explanations that address their questions about the environment.	observations and findings into coherent explanations.	Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	1E. Organizing information – Learners are able to describe data and organize information to search for relationships and patterns concerning the environment and environmental topics.	1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation.	1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes.	Students can make presentations to SBDM, PTO, local organizations in support of recycling, Styrofoam use, rain gardens using PowerPoints, Prezi and Wiki
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.	3.2A*. Forming and evaluating personal views – Learners are able to examine and express their own views on environmental issues.	3.2A*. Forming and evaluating personal views – Learners are able to identify, justify, and clarify their views on environmental issues and alternative ways to address them.	3.2A*. Forming and evaluating personal views – Learners are able to communicate, evaluate, and justify their own views on environmental issues and alternative ways to address them.	Students can make presentations to SBDM, PTO, local organizations in support of recycling, Styrofoam use, rain gardens using PowerPoints, Prezi and Wiki

*If the nature of the listening and speaking involves an environmental issue, 3.1C, 3.1D, 3.2A would connect to this standard.

READING FOR LITERACY IN HISTORY AND SOCIAL STUDIES:

Reading for Literacy in History and Social Studies (6-12)	NAAEE: Guidelines for Learning (6-8)	NAAEE: Guidelines for Learning (9-12)	Suggestions for Implementation
Key Ideas and Details			
RH1. Cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information.	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 3.1A. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 3.1A. Identifying and investigating issues – Learners apply their research and analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope. 	Consider local interest topics, such as the economic and environmental effects of coal mining in Kentucky, using various texts and interviews with coal miners.
RH2. Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop	1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations.	1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	

over the course of the text.			
RH3. Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them.	1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation.	 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 3.1B* Sorting out the consequences of issues – Learners are able to evaluate the consequences of specific environmental changes, conditions, and issues for human and ecological systems. 	Consider topics such as the effects of industrialization on farming, what precipitates the designation of a body of water as an impaired waterway, etc.
Craft and Structure			
RH4. 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 science.	_	_	
RH5. Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.	_	_	

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.	reliability – Learners are able to judge the weaknesses and strengths of the information they are using.	reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources.	
Integration of Knowledg	e and Ideas		
RH7. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 1F. Working with models and simulations – Learners understand many of the uses and limitations of models. 	 1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 1F. Working with models and simulations – Learners are able to create, use, and evaluate models to understand environmental phenomena 	
RH8. Assess the extent to which the reasoning and evidence in a text support the author's claims.	 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	

RH9. Compare and contrast treatments of the same topic in several primary and secondary sources.	 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners can develop simple explanations that address their questions about the environment. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 	
Range of Reading and Te	ext Complexity		
RH10. By the end of grade 10, read and comprehend history/social studies texts in the grades 9–10 text complexity band independently and proficiently.	_	_	

*If the nature of the literacy assignment involves an environmental issue, then 3.1B would connect to this standard.

• Note: Since the 6-8, 9-10 and 11-12 standards in this section are so similar, we decided to use a generic "RH1, RH2, etc." and chose to use the 9-10 wording since it was in the middle of the three sets. We did NOT use the Anchor Standards for College and Career Readiness Anchor Standards for Reading or College and Career Readiness Anchor Standards for Writing.

READING FOR LITERACY IN SCIENCE AND TECHNICAL SUBJECTS

Anchor Standards for Reading in Science and Technical Subjects (6-12)	NAAEE: Guidelines for Learning (6-8)	NAAEE: Guidelines for Learning (9-12)	Suggestions for Implementation
Key Ideas and Details			
RST1. Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 	
RST2. 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.	1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations.	1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	Consider topics such as the effects of urbanization on the DNA of aquatic organisms, the effect of lawn fertilizer or cows on water quality, etc.
RST3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.	_	_	

Craft and Structure			
RST4. 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 <i>grades 9–10 texts</i> <i>and topics</i> .	_	_	
RST5. Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., <i>force, friction, reaction force, energy</i>).	_	_	
RST6. 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.	_	_	
Integration of Knowledge and Ideas			
RST7. 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.	 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 1F. Working with models and simulations – Learners understand many of the uses and limitations of models. 	 1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 1F) Working with models and simulations – Learners are able to create, use, and evaluate models to understand environmental phenomena. 	

RST8. 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.	 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 			
RST9. 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.	1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using.	1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources.			
Range of Reading and Text Complexity					
RST10. By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.	_	_			

• Note: Since the 6-8, 9-10 and 11-12 standards in this section are so similar, we decided to use a generic "RST1, RST2, etc." and chose to use the 9-10 wording since it was in the middle of the three sets. We did NOT use the Anchor Standards for College and Career Readiness Anchor Standards for Reading or College and Career Readiness Anchor Standards for Writing.

Writing for Literacy in History/Social Studies/ Science/Technical Subjects

WRITING FOR LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS

Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects (6-12)	NAAEE: Guidelines for Learning (6-8)	NAAEE: Guidelines for Learning (9-12)	Suggestions for Implementation
Text Types and Purposes			
WHST1. Write arguments focused on <i>discipline-specific content</i> .	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 2.3E*. Change and conflict – Learners understand that human social systems change over time and that conflicts sometimes arise over differing and changing viewpoints about the environment. 3.1A*. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community. 3.1B*. Sorting out the consequences of 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses. 2.3E*. Change and conflict – Learners understand the functioning of public processes for promoting and managing change and conflict, and can analyze their effects on the environment. 3.1A*. Identifying and investigating issues – Learners apply their research and analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope. 	

WHST2. Write informative / explanatory texts, including the narration of historical events, scientific procedures / experiments, or technical processes.	 issues – Learners are able to apply their knowledge of ecological and human processes and systems to identify the consequences of specific environmental issues. 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners are able to identify and develop action strategies for addressing particular issues. 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations. 	 3.1B* Sorting out the consequences of issues – Learners are able to evaluate the consequences of specific environmental changes, conditions, and issues for human and ecological systems. 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners are able to identify and propose action strategies that are likely to be effective in particular situations and for particular purposes. 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes. 1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypothesee 	
WHST3. (See note; not applicable as a separate requirement)	(See Note – Not Applicable)	their initial questions and hypotheses. (See Note – Not Applicable)	

Note		
Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import. In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results.	Writing	
WHST4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation. 	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1E. Organizing information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes.

WHST5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	_	_	
WHST6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	_	_	
Research to Build and Present H	(nowledge		
WHST7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the	1A. Questioning – Learners are able to develop, focus, and explain questions that help them learn about the environment and do environmental investigations.	1A. Questioning – Learners are able to develop, modify, clarify, and explain questions that guide environmental investigations of various types. They understand factors that influence the questions they pose.	
inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	1B. Designing Investigations – Learners are able to design environmental investigations to answer particular questions— often their own questions.	1B. Designing Investigations – Learners know how to design investigations to answer particular questions about the environment. They are able to develop approaches for investigating unfamiliar types of problems and	
	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – 	 phenomena. 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including 	

	Learners are able to judge the weaknesses and strengths of the information they are using.	computer programs that access, gather, store, and display data.	
	1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation.	1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources.	
	1G. Drawing conclusions and developing explanations – Learners are able to synthesize their observations and findings into coherent explanations.	1E. Organizing Information – Learners are able to organize and display information in ways appropriate to different types of environmental investigations and purposes.	
	3.1A*. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own	1G. Drawing conclusions and developing explanations – Learners are able to use evidence and logic in developing proposed explanations that address their initial questions and hypotheses.	
	community.	3.1A*. Identifying and investigating issues – Learners apply their research and analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope.	
WHST8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and 	1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data.	
selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	strengths of the information they are using. 1E. Organizing information – Learners are able to classify and order data, and to organize and display information in ways that help analysis and interpretation.	 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 1E. Organizing Information – Learners are able to organize and display 	

	3.1A*. Identifying and investigating issues – Learners are able to use primary and secondary sources of information, and apply growing research and analytical skills, to investigate environmental issues, beginning in their own community.	 information in ways appropriate to different types of environmental investigations and purposes. 3.1A*. Identifying and investigating issues – Learners apply their research and analytical skills to investigate environmental issues ranging from local issues to those that are regional or global in scope. 	
WHST9. Draw evidence from informational texts to support analysis, reflection, and research.	 1C. Collecting information – Learners are able to locate and collect reliable information about the environment or environmental topics using a variety of methods and sources. 1D. Evaluating accuracy and reliability – Learners are able to judge the weaknesses and strengths of the information they are using. 3.1B*. Sorting out the consequences of issues – Learners are able to apply their knowledge of ecological and human processes and systems to identify the consequences of specific environmental issues. 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners are able to identify and develop action strategies for addressing particular issues. 	 1C. Collecting information – Learners are able to locate and collect reliable information for environmental investigations of many types. They know how to use sophisticated technology to collect information, including computer programs that access, gather, store, and display data. 1D. Evaluating accuracy and reliability – Learners can apply basic logic and reasoning skills to evaluate completeness and reliability in a variety of information sources. 3.1B* Sorting out the consequences of issues – Learners are able to evaluate the consequences of specific environmental changes, conditions, and issues for human and ecological systems. 3.1C*. Identifying and evaluating alternative solutions and courses of action – Learners are able to identify and propose action strategies that are likely to be effective in particular situations and for particular purposes. 	
Range of Writing		·	
WHST10. Write routinely over extended time frames (time for reflection and revision) and	_	_	

shorter time frames (a single		
sitting or a day or two) for a range		
of discipline-specific tasks,		
purposes, and audiences.		

*If the nature of the written argument involves an environmental issue, then 2.3E and 3.1A, 3.1B, and 3.1C would connect to this standard.

- Note: According to the Common Core Standards, this is not applicable as a separate requirement.
- Note: Since the 6-8, 9-10 and 11-12 standards in this section are so similar, we decided to use a generic "WHST1, WHST2, etc." and chose to use the 9-10 wording since it was in the middle of the three sets. We did NOT use the Anchor Standards for College and Career Readiness Anchor Standards for Reading or College and Career Readiness Anchor Standards for Writing.