

RETURN OF THE OMASHKOOZ

6th-8th Grade Discussion Guide

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SCIENCE CATEGORIES

Natural Resources, Wildlife Management, Wildlife Conservation, Stewardship, Natural Resource Interpretation

TIMEFRAME

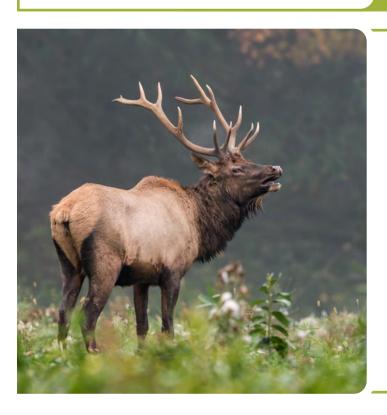
Three 45-minute sessions

MATERIALS

Access to computers and the internet, poster materials – poster board, markers, etc. or computer software for graphic presentation and printing

KEY WORDS

Ojibwe, Omashkooz, restoration, reintroduction, ceded territory, interpretation, interpretive panel



LEARNING OBJECTIVES

Students will be able to:

- Identify what caused elk to disappear from the Wisconsin landscape
- Describe ways in which Native American tribes in Wisconsin and the Great Lakes Region incorporate elk into their way of being
- Explain some elements of wildlife management used to restore a native animal
- Describe the role Native Americans have played in returning elk to the Wisconsin landscape and what has motivated Native Americans to participate in this effort
- Demonstrate where elk historically lived in Wisconsin and where they have been re-introduced and managed

ACTIVITY SUMMARY

In this lesson, students will take on the role of Interpretive Naturalists to tell the story of the return of elk to Wisconsin's landscape through the creation of interpretive panels for a wildlife viewing station. One of the largest members of the deer family, elk are about 4 times larger than Wisconsin's White-tail Deer. We call them Elk. The Ojibwe call them Omashkooz. After being gone for over 130 years, Elk now roam the forest regions of Wisconsin in greater numbers. In this lesson, students will discover when and why elk disappeared from Wisconsin's landscape, will explore the restoration efforts that have brought them back, and will delve into how and why Native American tribes are involved in the efforts to bring them back.





VOCABULARY

OJIBWE - Ojibwe, Ojibwa, Chippewa, Saulteaux are an Anishinaabe people currently of southern Canada, the upper Midwest, and Northern Plains regions of the United States.

CEDED TERRITORY – lands granted to another party as part of a treaty. The Ceded territory in Wisconsin is an area that encompasses 22,400 square miles of northern Wisconsin that were ceded to the United States by the Lake Superior Chippewa Tribes in 1837 and 1842.

OMASHKOOZ - an Ojibwe word for elk

RESTORATION – returning a species to its former condition and place

REINTRODUCTION – returning a species by bringing that species from another area or region

INTERPRETATION – the act of connecting visitors to natural, cultural, and historical resources at parks, museums, historical sites, and aquaria

INTERPRETIVE PANEL – a sign that connects visitors with natural, cultural, and historical resources

BACKGROUND INFORMATION

The European settlement of North America caused major disturbances to the landscape resulting in loss of habitat, loss of many species of wildlife, and upheaval to the Native American way of life. Before the arrival of the Pilgrims, over 10 million elk roamed across North America. We call them Elk. The Ojibwe call them Omashkooz. Elk (Cervus elaphus), Wisconsin's largest native mammal, once ranged over most of North America and Wisconsin. They were eliminated from Wisconsin in the mid to late 1800's due to unregulated hunting and habitat loss. Wild elk were last recorded in Wisconsin in 1886 and historic records show elk once inhabited at least 50 of the state's 72 counties. An attempt at bringing elk back to the state in the 1930's failed because of poaching, and the last four elk were reportedly killed in 1948.

More than 130 years after they were first eliminated, elk once again live in our state. Historically, elk primarily inhabited the prairie and savanna lands of the southern portion of the state; today, most of the suitable elk habitat is in the north. This change is due to the large-scale conversion of land in the south from prairie to agriculture. There are two distinct areas where elk are found in Wisconsin. The largest and oldest elk herd in the state is the Northern, or Clam Lake, elk herd. The Clam Lake herd ranges across Ashland, Bayfield, Price, Rusk, and Sawyer counties in northern Wisconsin. The Central, or Black River, elk herd is found in the forested region of Jackson County in the central part of the state.





The reintroduction of elk to Wisconsin has been underway for more than 25 years. In 1993, the University of Wisconsin-Stevens Point began studying the idea of reintroducing elk in the Chequamegon-Nicolet National Forest. In February 1995, 25 elk were trapped in Michigan's lower peninsula. They were held in a quarantine facility while undergoing disease testing and then were transported to the Clam Lake release site in the Chequamegon-Nicolet National Forest. After being held in a pen for an acclimation period, the elk were released into the National Forest in May 1995. At that time plans were also made, but not carried out, to reintroduce elk to the Black River State Forest near Black River Falls in west central Wisconsin (Jackson County). Management responsibility for the Clam Lake herd was transferred from the UW-SP to the Wisconsin Department of Natural Resources (Wisconsin DNR) in 2000 after the initial reintroduction study was considered a success. At that time, approximately 40 elk were present in the herd.

In 2014, the Wisconsin DNR entered into an agreement with the state of Kentucky to translocate as many as 150 wild elk over a period of up to five years. The overall plan involved dividing these animals into two areas of the state, including releasing up to 75 elk to establish a new elk herd in the Black River State Forest with a long-term population goal of 390 elk. This effort occurred in 2015 and 2016 with 73 elk released. The plan also called for adding up to 75 elk to the existing Clam Lake herd with a long-term population goal for the Clam Lake herd of 1,400 elk. One year of this effort was completed in 2017, resulting in the release of 31 Kentucky elk into the Flambeau River State Forest (FRSF) near the town of Winter. Early spring of 2019 marked the final translocation effort, with 48 elk transported to the FRSF in April. Including calves born while in quarantine, 60 elk were released in August.

In the ceded territories, lands in northern Wisconsin that were given to the United States by the Ojibwe tribe in various treaties, the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) is the DNR. They are the natural resources department for the Ojibwe Nation and are involved in management efforts of elk. The Ojibwe also contribute financially to the management through the gaming monies. The Rocky Mountain Elk Foundation is another partner, along with the WDNR, in the restoration of elk in Wisconsin. The Ho-Chunk Nation has also contributed funds towards the restoration efforts.

In March 2018, elk herd projections for the Clam Lake herd exceeded the 200-elk threshold established in administrative rule for offering a limited elk hunting season. As a result, Wisconsin held its first managed elk hunt in state history in 2018 with ten harvest tags split equally between the state and Native American tribes. By late 2019, the Clam Lake elk herd was projected to exceed 230 animals (not including those translocated from Kentucky) and the Black River elk herd was projected to be 75-80 individuals.

The Clam Lake elk herd was estimated to be approximately 330 individuals as of July 2021. With the addition of new animals through natural reproduction within the herd, and the translocation of elk from Kentucky in the spring of 2017 and 2019, the herd has grown to a level that can sustain an annual bull-only hunting season and now occupies much of the Clam Lake Elk Range. This population has grown slowly, but steadily since reintroduction in 1995.

The Black River elk herd was estimated to contain approximately 115 animals as of July 2021. With approximately 25 calves expected to have been born in the spring, the herd is growing rapidly and settling in well to their new home. Vehicle collisions have been the leading cause of mortality in the Black River herd, and no elk have been killed by predation since January of 2017. After the initial few years post reintroduction, the population is beginning to climb, and the Black River herd is now an established wild herd in central Wisconsin.





LEARNING PROCEDURE

INTRODUCTION:

Before watching the *Into Bringing Back Wisconsin's Elk* classroom video, ask students what they know about the conservation and restoration of native species. What are some methods they are aware of for conserving wild animals? (Have they watched "The Zoo", "Bronx Zoo", or "Crikey! It's the Irwins"?) Have students brainstorm a list of species they are aware of that people have attempted to bring back or increase in numbers. Are there any in Wisconsin? Who are the individuals or groups involved in these kinds of projects? Why might they choose, as individuals or groups, to be involved in a conservation project? Why would you want to restore a native species?

Go over the questions with the students before viewing so they know what to look and listen for.

After viewing the video, continue the discussion of why various groups were involved in this elk reintroduction project. Then, divide students into the following groups:

- · All About Elk
- The Past, Present, and Future of Elk in Wisconsin
- Timeline of Bringing Back Wisconsin's Elk project
- · Partners in Bringing Back Wisconsin's Elk

Have students download and print, or hand out to each student, their respective Interpretive Panel Worksheets. Ask them to review the details and assignments of the worksheet in preparation for Session 2 (Activity 1).

ACTIVITY 1:

Following the Go Wild forestry segment, generate a list of all the possible forestry careers using the Give One, Get One protocol.

Individually students are given five minutes to write a list with a brief description of every forestry career they are able to recall from the video. If students are aware of other forestry careers that weren't highlighted, they should add them to their list as well.

After students have generated their lists, ask them to stand up and find a partner. Instruct students that they will have five minutes. One partner should begin by sharing one career, the brief description and what they found interesting about it. Then, the second partner will share a different career, description and points of interest. If either partner didn't have the career their partner shared, they should add it to their list.

When the timer sounds instruct students to find a new partner. Repeat step two three or four times with a new partner.





ACTIVITY 2: Interpretive Panel Review

Have students post their panels so that the class can rotate past and review the panels all at one time. Give each student 3-5 "sticky notes" to be used as they review the panes. Students can write a question they still have about the panel's topic or share an additional piece of information they learned that is relevant to the panel. Allow students about 5 minutes per panel to review and place their questions.

Next, give teams 5-10 minutes to review the questions at their panels, find answers if needed, and plan how they might incorporate that information into their panels in a final version.

CONCLUSION:

Have a class discussion relating to what information was most memorable from the panels. Did students learn something from a panel they had not found in their own research? Is there something else the public might want to know that isn't covered in any panels (cost, future of the herd, ethics, etc.)? In what ways might visitors from various backgrounds (i.e.: Native Americans, immigrants, city dwellers, hunters, non-hunters, farmers) hold perspectives different from what you have provided? Would they emphasize something else?

EXTENDING THE LESSON (Options for extended/additional activities and lessons)

- · Have students revise their panels and present them to the partners for review and input.
- Have students develop another form of interpretive presentation (brochure, guided walk, quest, game, or storytelling) to share the information.

RELATED LINKS

- dnr.wisconsin.gov/topic/wildlifehabitat/elk
- glifwc.org
- <u>eekwi.org/animals/mammals/elk</u>



RETURN OF THE OMASHKOOZ PRE-LESSON STUDENT WORKSHEET



Student Name:	Class:	Date:
1) What kinds of habitats do elk live in?		
2) How many elk roamed North America prior to a	arrival of Europeans?	
3) What happened that caused elk to disappear fro		
4) Who are the Ojibwe Nation and where are they	located?	
5) What does Elder Dennis White mean when he sa	ays, "restoring our very ways of	life"?
6) Why were the Ojibwe involved in releasing the e	elk and in bringing them back?	
7) How are/were the elk used by Native Americans		





ALL ABOUT ELK

Interpretive Group Worksheet



Student Name:	Class:	Date:
Interpreters connect visitors to important natural, cultural, and aquaria, and other places where people gather to view and lear share these resources with the public is through interpretive center, museum, or historical site you have visited. An interpret the theme. Panels may have text, images, maps, videos, dials, so they often are in place for 10 or more years. Be sure that you	n about the world panels. You have ive panel usually liding panels, etc.	d around them. One way interpreters e likely seen such panels at a nature focuses on 3-5 important points about Interpretive panels can be expensive,
Congratulations! A wildlife viewing area has been created in the to create an interpretive panel with the theme: All About Elk . A you want everyone else to know how to spot an elk, identify i of these large mammals. Use the following questions to guid interpretive panel that explains the most important things a vis	s outdoor enthus ts tracks and ant e your research	iasts and interpretive professionals, clers, and understand the life needs into elk and to help you create an
1) How can you tell an elk from deer or moose?		
2) Are elk the same across North America?		
3) How much space do elk need to survive and thrive? Where is	that space found	in Wisconsin?
4) What type of food do they eat and where can that be found in	n Wisconsin?	



5) How might you describe a day in the life of an elk? When might you be most likely to see them?	
6) Based on the life cycle of elk, how fast might a herd grow?	
7) How have various parts of an elk been used in Native American life, past and present?	
8) How can wildlife managers predict goals in the growth of the herd?	
9) Is there something unique about elk that you want visitors to know?	





THE PAST, PRESENT, AND FUTURE OF ELK IN WISCONSIN

Interpretive Group Worksheet



Student Name:	Class:	Date:
Interpreters connect visitors to important natural, cultural, and haquaria, and other places where people gather to view and learn share these resources with the public is through interpretive penter, museum, or historical site you have visited. An interpretive the theme. Panels may have text, images, maps, videos, dials, sli so they often are in place for 10 or more years. Be sure that your	about the world around panels. You have likely so we panel usually focuses of ding panels, etc. Interpre	them. One way interpreters een such panels at a nature on 3-5 important points about tive panels can be expensive,
Congratulations! A wildlife viewing area has been created in the to create an interpretive panel with the theme: The Past, Pres enthusiasts and interpretive professionals, you want visitors to uselk have been re-introduced and are being managed for the fut of the elk herds in Wisconsin. Use the following questions to guid interpretive panel that explains the most important things a visit	sent, and Future of Elk nderstand why elk disap ture, and that the public de your research into elk	in Wisconsin. As outdoor peared from Wisconsin, that plays a role in the success
1) Where were elk found before Europeans arrived in America?		
2) How did Native Americans interact with and use elk in their da	ily lives?	
3) What became of the elk in Wisconsin as the state became mor	e settled?	
4) What considerations had to be made for the health of the elk,	other wildlife, and livesto	ock?



5) How long have people been trying to restore elk to Wisconsin? Is the project mentioned in the video the only attempt to restore elk?
5) What is the current status of elk in Wisconsin?
7) Where are the elk now located in Wisconsin? Is this the same area where they were found historically?
8) What will happen as the elk population continues to grow? What other places in Wisconsin could the elk herd expand to if it grows too large for the planned area? Ask the Elk team if they have any ideas.



TIMELINE OF BRINGING BACK WISCONSIN'S ELK PROJECT

Interpretive Group Worksheet



Student Name:	Class:	Date:
Interpreters connect visitors to important natural, cultural, a aquaria, and other places where people gather to view and share these resources with the public is through interpret center, museum, or historical site you have visited. An interpret the theme. Panels may have text, images, maps, videos, dial so they often are in place for 10 or more years. Be sure that	learn about the wor cive panels. You have pretive panel usually s, sliding panels, etc	Id around them. One way interpreters we likely seen such panels at a nature of focuses on 3-5 important points about c. Interpretive panels can be expensive,
Congratulations! A wildlife viewing area has been created in to create an interpretive panel with the theme: Timeline enthusiasts and interpretive professionals, you want visite restoring elk to the Wisconsin landscape. Use the following and to help you create an interpretive panel that explains the	of Bringing Back Vors to understand to questions to guide y	Visconsin's Elk Project. As outdoor the time and effort that has gone into your research into this elk restoration
What are some of the reasons for restoring and re-introd	ucing elk to Wiscons	sin?
2) How long has this project been underway?		
3) Where did the project get started and who else has been	involved in the effor	rt?
4) Describe the various introductions of elk from outside Wi	sconsin during this	restoration effort.



5) Briefly describe the management goals (how many elk in how big an area, how many elk before hunting is allowed,
how many elk can be hunted in a season, how to be sure elk have the habitat and food resources they need to flourish).
6) What kind of work continues to be done to ensure the ongoing success of this project?
7) What are the plans for the future of the elk herds in Wisconsin? Could there ever be too many elk?



PARTNERS IN BRINGING BACK WISCONSIN'S ELK

Interpretive Group Worksheet



Student Name:	Class:	Date:
Interpreters connect visitors to important natural, cultural, and haquaria, and other places where people gather to view and learn share these resources with the public is through interpretive pecenter, museum, or historical site you have visited. An interpretive the theme. Panels may have text, images, maps, videos, dials, slice so they often are in place for 10 or more years. Be sure that your	about the world around thanels. You have likely see e panel usually focuses on ling panels, etc. Interpretiv	nem. One way interpreters on such panels at a nature 3-5 important points about we panels can be expensive,
Congratulations! A wildlife viewing area has been created in the congratulations! A wildlife viewing area has been created in the congrature of the congratu	ng Back Wisconsin's Elk. A ese elk didn't just magically owing questions to guide yo	As outdoor enthusiasts and reappear; several groups our research into this elk
1) There are four major partners discussed in the video who have be	een part of bringing back ell	k to Wisconsin; who are they?
2) How do the partner groups describe their role in conservation	?	
3) Describe the role that each of these partners has played in the	project.	
4) Why have these groups chosen to be involved? Describe a few	of each groups' reasons.	



5) Have other groups been involved? Discover how this project began and who was involved.
6) How might other groups or individuals, including students, get involved in the future?
7) What role might these partners play in the future in terms of ensuring that the elk have the habitat they need and that the herd remains healthy?





The following National Common Core Standards can be met teaching;

RETURN OF THE OMASHKOOZ

6TH GRADE:

CCSS.ELA-LITERACY.RI.6.1	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.6.2	Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
CCSS.ELA-LITERACY.RI.6.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
CCSS.ELA-LITERACY.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
CCSS.ELA-LITERACY.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.6.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.6.6	Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.
CCSS.ELA-LITERACY.W.6.7	Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
CCSS.ELA-LITERACY.W.6.8	Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.
CCSS.ELA-LITERACY.W.6.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.6.2	
	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.6.3	
CCSS.ELA-LITERACY.SL.6.3 CCSS.ELA-LITERACY.SL.6.4	explain how it contributes to a topic, text, or issue under study. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by
	explain how it contributes to a topic, text, or issue under study. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear





CC35.ELA-LITERACT.L.O.T	speaking.
CCSS.ELA-LITERACY.L.6.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.6.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.6.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.6.5	$Demonstrate\ understanding\ of\ figurative\ language, word\ relationships, and\ nuances\ in\ word\ meanings.$
CCSS.ELA-LITERACY.L.6.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
7TH GRADE:	
CCSS.ELA-LITERACY.RI.7.1	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.7.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.
CCSS.ELA-LITERACY.W.7.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.7.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.7.6	Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.
CCSS.ELA-LITERACY.W.7.7	Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.
CCSS.ELA-LITERACY.W.7.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
CCSS.ELA-LITERACY.W.7.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.SL.7.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.7.2	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.7.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.
CCSS.ELA-LITERACY.SL.7.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.7.5	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.

Demonstrate command of the conventions of standard English grammar and usage when writing or





CCSS.ELA-LITERACY.SL.7.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.7.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.7.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.7.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.7.4	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.7.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.7.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.
8TH GRADE:	
CCSS.ELA-LITERACY.RI.8.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.8.2	Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
CCSS.ELA-LITERACY.RI.8.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
CCSS.ELA-LITERACY.W.8.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.W.8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
CCSS.ELA-LITERACY.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
CCSS.ELA-LITERACY.W.8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
CCSS.ELA-LITERACY.W.8.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.
CCSS.ELA-LITERACY.SL.8.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.8.3	Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.





CCSS.ELA-LITERACY.SL.8.4	Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.
CCSS.ELA-LITERACY.SL.8.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
CCSS.ELA-LITERACY.SL.8.6	Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.
CCSS.ELA-LITERACY.L.8.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
CCSS.ELA-LITERACY.L.8.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
CCSS.ELA-LITERACY.L.8.3	Use knowledge of language and its conventions when writing, speaking, reading, or listening.
CCSS.ELA-LITERACY.L.8.4	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
CCSS.ELA-LITERACY.L.8.5	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
CCSS.ELA-LITERACY.L.8.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

6TH-8TH GRADE:	
CCSS.ELA-LITERACY.RST.6-8.1	Cite specific textual evidence to support analysis of science and technical texts.
CCSS.ELA-LITERACY.RST.6-8.2	Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
CCSS.ELA-LITERACY.RST.6-8.4	Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
CCSS.ELA-LITERACY.RST.6-8.7	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
CCSS.ELA-LITERACY.RST.6-8.8	Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
CCSS.ELA-LITERACY.RST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.
CSS.ELA-LITERACY.WHST.6-8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.
CCSS.ELA-LITERACY.WHST.6-8.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.WHST.6-8.5	With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
CCSS.ELA-LITERACY.WHST.6-8.6	Use technology, including the Internet, to produce and publish writing and present the relationships

between information and ideas clearly and efficiently.





NEXT GENERATION SCIENCE STANDARDS:

MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.]