



EXPEDITIONARY  
LEARNING

# **Grade 6: Module 4: Unit 2: Lesson 2**

## **Applying Research Skills: “Rachel Carson: Environmentalist and Writer”**



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.  
Exempt third-party content is indicated by the footer: © (name of copyright holder). Used by permission and not subject to Creative Commons license.



**Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)**

I can compare how different authors portray the same idea or event. (RI.6.9)

I can provide a list of sources I used to gather information in a bibliography. (W.6.8)

I can assess the credibility of each source I use. (W.6.8)

**Supporting Learning Targets**

- I can record bibliographic information for the sources I read in my research.
- I can assess the credibility of the article “Rachel Carson: Environmentalist and Writer.”
- I can analyze the author’s presentation of information and ideas in “Rachel Carson: Environmentalist and Writer.”

**Ongoing Assessment**

- Learning from Frightful’s Perspective: Chapter 13 (from homework)
- Researcher’s notebook
- Comparing and Contrasting Authors’ Presentation graphic organizer



Agenda	Teaching Notes
<ol style="list-style-type: none"> <li>1. Opening               <ol style="list-style-type: none"> <li>A. Engaging the Reader: “Learning from Frightful’s Perspective” (8 minutes)</li> <li>B. Unpacking Learning Targets (2 minutes)</li> </ol> </li> <li>2. Work Time               <ol style="list-style-type: none"> <li>A. Citing Our Sources (20 minutes)</li> <li>B. Authors’ Presentation of Ideas and Information: “Rachel Carson: Environmentalist and Writer” (10 minutes)</li> </ol> </li> <li>3. Closing and Assessment               <ol style="list-style-type: none"> <li>A. Revisiting the “Big Idea” of the Module (5 minutes)</li> </ol> </li> <li>4. Homework               <ol style="list-style-type: none"> <li>A. Read Chapter 14, “Sam Battles Bird Instincts” and complete Learning from Frightful’s Perspective: Chapter 14..</li> </ol> </li> </ol>	<ul style="list-style-type: none"> <li>• As students collect basic bibliographic information, they must understand how to give credit to the source providing the information. Discuss the importance of giving credit where credit is due. See the Unit 3 overview for additional resources on this topic for teacher reference.</li> <li>• In this lesson, students begin recording the authors, titles, sources, and dates of the sources they use to collect information. They also begin to assess the credibility of research texts. It is important to consider several factors: who published the text, when it was published, who wrote it, why was it written, and what evidence, facts, and details were used to support the author’s claims or ideas.</li> <li>• Guiding students through the process of evaluating sources is an important part of their learning, as well as a model for developing and expressing relevant information and opinions.</li> <li>• Students will again use the “Rachel Carson: Environmentalist and Writer” article they read for gist and paraphrasing information about the benefits or consequences of DDT in Lesson 1. They will now add both bibliographic and credibility source information to the researcher’s notebook. Refer to Assessing Sources (see supporting materials) as a guide for assessing the credibility of a source text.</li> <li>• Students reread “Rachel Carson: Environmentalist and Writer” and answer text-dependent questions to guide them toward understanding and identifying how an author presents information and ideas. Evaluating this information helps students compare and contrast one article with another.</li> <li>• In this lesson and Lesson 3, different authors wrote the articles about Rachel Carson and a similar topic. This helps students move toward mastery of RI.6.9, in which students compare and contrast one author’s presentation of ideas with that of another. In future lessons, and in other articles in the research folder, students read texts with varied viewpoints about the issue of DDT, in order to be exposed to a more balanced analysis.</li> <li>• In advance: Review the Assessing Sources graphic organizer. Reread the article “Rachel Carson: Environmentalist and Writer” to identify how the author presents the article, what type of evidence is used, and how text features are used.</li> <li>• In advance: Preview and prepare to display the video (see Opening Part A).</li> <li>• Post: Learning targets.</li> </ul>



Lesson Vocabulary	Materials
bibliographic, assess, credibility, analyze; poachers (153) pesticides, insecticides, biocides, herbicides	<ul style="list-style-type: none"><li>• <i>Frightful's Mountain</i> (book; one per student)</li><li>• Peregrine Falcon Facts anchor chart (from Unit 1)</li><li>• Video: “2010 time lapse feeding 4/8/10 to 5/24/10; SCPBRG Falcons” <a href="http://www.youtube.com/watch?v=6d_6Xk36Zfw">http://www.youtube.com/watch?v=6d_6Xk36Zfw</a></li><li>• Research folder (from Lesson 1)</li><li>• Researcher’s notebook (from Lesson 1; in research folder)</li><li>• Credibility Checklist (from Lesson 1; in research folder)</li><li>• “Rachel Carson: Environmentalist and Writer” (from Lesson 1; in research folder)</li><li>• Document camera</li><li>• Equity sticks</li><li>• Comparing and Contrasting Authors’ Presentation graphic organizer (one per student)</li><li>• Learning from Frightful’s Perspective: Chapter 14 (one per student)</li></ul>



Opening	Meeting Students’ Needs
<p><b>A. Engaging the Reader: “Learning from Frightful’s Perspective” (8 minutes)</b></p> <ul style="list-style-type: none"> <li>• Be sure students have their text, <i>Frightful’s Mountain</i>. Ask students to join their triad partners to share their responses to the “Learning from Frightful’s Perspective” focus question for Chapter 13, “Sam Takes Charge.” Remind students to include evidence supporting their thoughts about why the men took two of Frightful’s eyases. Encourage students to use and explain the glossary term <i>poachers</i> as they discuss their responses.</li> <li>• Ask students to share terminology they found in the chapter and added to “Words I Found Difficult.” Tell students to look for context clues and use those as they collaborate to determine the meaning of difficult words. Remind students to write the words, page numbers they were found on, and a brief definition as they record new vocabulary.</li> <li>• Circulate to observe students’ verbal and written responses. Acknowledge triads working as a team to share evidence-based responses and determine meanings of new words. Interact with those who need support to develop response skills and identify and define new vocabulary words.</li> <li>• Refocus students whole group. Invite students to share their responses to the focus question. Ask students what information about enemies or threats to peregrine falcons could be added to the <b>Peregrine Falcon Facts anchor chart</b>.</li> <li>• As students identify the poachers who stole two of Frightful’s eyases, invite them to share why the poachers took the eyases. Ask them if they know of other living things that are captured or killed for similar reasons.</li> <li>• To build student interest, show a brief <b>video: “2010 time lapse feeding 4/8/10 to 5/24/10; SCPBRG Falcons.”</b></li> <li>• Remind students that in today’s lesson they will continue to learn how to collect information about research. Explain that the steps they’ll take will help them as they gather credible information and develop their own thoughts about how we try to balance the needs of people and the natural world.</li> <li>• As students respond, circle words on the posted learning target and annotate words for meaning. Emphasize and review the words <i>bibliographic</i>, <i>assess</i>, <i>credibility</i>, and <i>analyze</i></li> </ul>	<ul style="list-style-type: none"> <li>• Some students may need support for responding to the Learning from Frightful’s Perspective focus question. Consider pulling these students into small groups for guided practice with the focus question and adding vocabulary to “Words I Found Difficult.”</li> <li>• Some students may need help independently reading chapters in <i>Frightful’s Mountain</i>. Consider providing a listening station with an audio version of the novel or guided reading support.</li> <li>• Adding visuals or graphics to the Peregrine Falcon Facts anchor chart can help students remember or understand key information. These visuals or graphics could be added throughout the reading of the novel.</li> <li>• Using visuals or graphics to respond to focus questions and help define new terminology can also help students remember and understand.</li> </ul>



Opening (continued)	Meeting Students’ Needs
<p><b>B. Unpacking Learning Targets (2 minutes)</b></p> <ul style="list-style-type: none"> <li>Focus students’ attention on the learning targets. Invite students to read the learning targets with you:             <ul style="list-style-type: none"> <li>“I can record bibliographic information for the sources I read in my research.”</li> <li>“I can assess the credibility of the article ‘Rachel Carson: Environmentalist and Writer.’”</li> <li>“I can analyze the author’s presentation of information and ideas in ‘Rachel Carson: Environmentalist and Writer.’”</li> </ul> </li> <li>Ask students to identify what words in the learning targets they think are most important.</li> </ul>	

Work Time	Meeting Students’ Needs
<p><b>A. Citing Our Sources (20 minutes)</b></p> <ul style="list-style-type: none"> <li>Explain that information used from an outside source must be documented. Some of the source information is called <i>bibliographic</i> information because it identifies the book, magazine, article, Web site, etc. that a particular subject was written in. Tell students that part of the documentation includes the organization or source that published it, how it was shared, and when it was published. Let students know that giving credit to the author or writer of sources they use for their writing and speaking is important. It acknowledges sources they use as credible and contributes to the credibility of their own information that they share as writers and speakers. Make sure students have their <b>research folder</b>.</li> <li>Distribute or ask students to take the <b>researcher’s notebook</b> out of their research folder.</li> <li>Distribute or ask students to take the <b>Credibility Checklist</b> out of their research folder.</li> <li>Distribute or ask students to take “<b>Rachel Carson: Environmentalist and Writer</b>” out of their research folder.</li> <li>Remind students that they have written the title in the “Source Information” section of the researcher’s notebook. Explain that they’ll use the article to complete other source information.</li> <li>Use a <b>document camera</b> to model recording source information as students find and add it to their researcher’s notebook.</li> <li>Use <b>equity sticks</b> to call on students. Ask where the author’s name is located and what it is. Tell students to write the author’s name in the researcher’s notebook. Use a document camera to model where the author’s name should be located.</li> <li>Tell students to complete the rest of the “Source Information” section. Invite them to look for information with an elbow partner.</li> </ul>	<ul style="list-style-type: none"> <li>As students collect, assess, and analyze research information, they’ll use a variety of materials. Teachers may remind students of strategies for keeping materials such as graphic organizers, articles, references, and vocabulary organized and maintained in their research folder.</li> <li>During transitions or after work completion, allow time for students to add or return materials to their research folders.</li> </ul>



Work Time (continued)	Meeting Students’ Needs
<ul style="list-style-type: none"> <li>• Have students use equity sticks to share the date and the source type of the article. Model writing this information on the researcher’s notebook displayed with the document camera.</li> <li>• Invite students to use the Credibility Checklist to guide them as they decide if the “Rachel Carson: Environmentalist and Writer” article was <i>credible</i> or able to be believed. Ask them to respond to the questions to help them decide if this source seems believable. Tell students to assess credibility and share their responses with an elbow partner.</li> <li>• Refocus students whole class. Call on students to share their credibility ratings. Explain that finding source information is an important part of choosing what they might use for research. Tell students to consider that as they respond to the questions: <ul style="list-style-type: none"> <li>* “Does this source help you refocus or refine your research question in any way? How?”</li> <li>* “What are new questions you would like answered before making your claim about DDT?”</li> </ul> </li> <li>• Inform students that looking for answers to the research question “Do the benefits of DDT outweigh its harmful consequences?” involves looking closely at authors’ claims and evidence.</li> <li>• Read aloud the first paragraph of the article as students read along. Ask what claim or central idea students can find. Model paraphrasing to record the central idea in that paragraph. For example: “Rachel Carson was a revolutionary.” Ask what detail or evidence supports that idea. Model by writing a quote that supports the idea: “Her work ... helped launch a new age of environmental awareness in the Untied States.”</li> <li>• Read aloud the rest of the excerpt as students read along. Ask students to think about what went wrong in nature. Ask what they feel is the claim or central idea. Model by paraphrasing a claim or central idea such as <ul style="list-style-type: none"> <li>* “Pesticides caused silence in nature.”</li> </ul> </li> <li>• Invite students to share a quote that has evidence to support the claim. Write a quote such as: <ul style="list-style-type: none"> <li>* “Pesticides had gotten into the water, air, and soil and were killing or sickening all sorts of creatures—including humans.”</li> </ul> </li> <li>• Ask students to look at the subtitle of the next excerpt, “Anything but Silence.” Encourage students to listen for or identify a claim or central idea presented in this excerpt. Read aloud as students read along.</li> <li>• Ask students what happened when people read Rachel Carson’s book <i>Silent Spring</i>. Listen for: “an uproar,” “furious,” “don’t worry ...” or “worry.” Explain that those responses suggest a claim or idea that many people reacted strongly to Rachel Carson’s book. Model paraphrasing the claim or idea by writing: <ul style="list-style-type: none"> <li>* “Many people reacted to Rachel Carson’s book.”</li> </ul> </li> </ul>	



Work Time (continued)	Meeting Students’ Needs
<ul style="list-style-type: none"><li>• Invite students to quote evidence that supports the claim or idea. Listen for quotes such as: “It caused such an uproar”; “Chemical manufactures were furious with Carson”; “But Americans did worry.” Model documenting evidence by using a quote that supports a claim.</li><li>• Read aloud as students read along in the next excerpt, “Coming to Terms with Nature.” Invite students to listen for a claim and evidence as they read.</li><li>• Call on students to share the claim or central idea expressed in the excerpt. Listen for responses suggesting that people are encouraged to think for themselves. Model paraphrasing by writing a statement such as: “Rachel Carson thought people should think for themselves about the use of pesticides.”</li><li>• Ask students to quote evidence in the text that supports the claim that was paraphrased. Model by recording quotes such as:<ul style="list-style-type: none"><li>* “As you listen to the present controversy about pesticides, I recommend that you ask yourself: Who speaks? And why?”</li><li>* “I deeply believe that we in this generation must come to terms with nature.”</li></ul></li><li>• Compliment students for using their close reading skills, and paraphrasing and quoting evidence to look closely or analyze how an author presents information.</li><li>• Tell students this is an important part of choosing what they might use for research in their argument. Tell students to consider that as they respond to the questions:<ul style="list-style-type: none"><li>* “Does this source help you to refocus or refine your research question in any way? How?”</li><li>* “What are new questions you would like answered before making your claim about DDT?”</li></ul></li><li>• Ask students to put their researcher’s notebook and their Credibility Checklist in their research folder. Explain they will read other articles and add information to the researcher’s notebook.</li></ul>	





Work Time (continued)	Meeting Students’ Needs
<p><b>B. Authors’ Presentation of Information and Ideas: “Rachel Carson: Environmentalist and Writer” (10 minutes)</b></p> <ul style="list-style-type: none"> <li>• Explain to students that different authors sometimes write about the same information, idea, or events. Those authors may portray their information differently.</li> <li>• Tell students that in another lesson, they will read an article about Rachel Carson written by a different author. Explain that they will compare that article to “Rachel Carson: Environmentalist and Writer.” To do that, it is important to look at how each author presents their information.</li> <li>• Distribute the <b>Comparing and Contrasting Authors’ Presentation graphic organizer</b> and display using a document camera. Invite students to write the title of the article, “Rachel Carson: Environmentalist and Writer,” under Text 1. Model as students write.</li> <li>• Tell students they will reread “Rachel Carson: Environmentalist and Writer.” During this close read, students should consider information to help them record responses to the following questions: <ul style="list-style-type: none"> <li>* “How does the author introduce the article?”</li> <li>* “What type of evidence does the author include?”</li> <li>* “How does the author use text features?”</li> </ul> </li> <li>• Inform students that authors use different writing techniques to introduce their topic with quotes, anecdotes, questions, facts and statistics.</li> <li>• Invite students to reread the first paragraph with an elbow partner. Tell students to pay attention to how the author, Kathy Wilmore, introduces her article.</li> <li>• Invite elbow partners to share what style they thought the author used to introduce the article. Listen for responses that include asking questions or sharing background knowledge. Use the document camera to model a response to the question using a complete sentence such as: “The author introduces the article by asking questions about what a revolutionary might be like.” Tell students to write the response on their graphic organizers.</li> <li>• Tell students you will read the next part of the article aloud as they read along. Encourage students to search for different types of evidence used in each excerpt. Explain that authors can present evidence in different ways such as facts, statistics, quotes, explanations, and stories.</li> </ul>	<ul style="list-style-type: none"> <li>• When introducing the Comparing and Contrasting Author’s Presentation graphic organizers or recording forms, consider using a document camera to visually display the document for students who struggle with auditory processing.</li> <li>• Providing models of expected work supports all learners but especially challenged learners.</li> <li>• Some students may benefit from identifying and adding only one or two types of evidence to the Comparing and Contrasting Author’s Presentation graphic organizer.</li> <li>• Using a document camera to model how the author introduces an article, what evidence is used, and how text features are used provides a visual cue to students as they learn how to identify and record this information.</li> </ul>



Work Time (continued)	Meeting Students’ Needs
<ul style="list-style-type: none"><li>• At the end of the first excerpt, pause and ask students:<ul style="list-style-type: none"><li>* “What type of evidence was used to support the idea that something had gone wrong in an American town?”</li></ul></li><li>• Listen for responses such as: “The author used facts about sickness and death”; “The author explained how pesticides were killing or sickening different creatures”; or “The author used a question to ask where had the birds gone.”</li><li>• Use the document camera again to model writing responses that explain the type of evidence an author includes in his/her writing. Ask students to write responses to identify some of the types of evidence Kathy Wilmore uses in “Rachel Carson: Environmentalist and Writer.”</li><li>• Tell students that looking at types of evidence can help them <i>analyze</i> or study closely and carefully what an author is saying.</li><li>• Explain that authors also use text features, such as photos, illustrations, graphs and charts, diagrams, quotes, captions, etc. to present information. Invite students to look closely at the article “Rachel Carson: Environmentalist and Writer” to see what text features were used.</li><li>• Call on students to identify text features they noticed. Listen for responses such as: “The author used a photo of Rachel Carson” and “The author used a quote.” Ask students to explain what text features were used on the Comparing and Contrasting Authors’ Presentation graphic organizer. Model as students record their responses.</li><li>• Ask students to place their graphic organizer in their research folder for future lessons.</li><li>• Compliment students for their investigation of how authors present information and for placing their work in their research folders.</li><li>• Tell students they will now think in a broader way about the research question: “Do the benefits of DDT outweigh its harmful consequences?”</li></ul>	



Closing and Assessment	Meeting Students’ Needs
<p><b>A. Revisiting the “Big Idea” of the Module (5 minutes)</b></p> <ul style="list-style-type: none"> <li>• Tell students that considering the research question “Do the benefits of DDT outweigh its harmful consequences?” can involve more than two positions. Explain that claims and evidence they have identified can expand their thinking. Tell them they will have the opportunity to consider different positions/possibilities about the use of DDT.</li> <li>• Introduce Four Corners. Post four pieces of chart paper with different DDT choices in different corners or parts of the room. Explain each of the choices. <ul style="list-style-type: none"> <li>– DDT is beneficial and can be used for many reasons.</li> <li>– DDT is beneficial only for preventing health problems like malaria and Lyme disease.</li> <li>– DDT is harmful only when used incorrectly.</li> <li>– DDT is harmful and should not be used.</li> </ul> </li> <li>• Ask students to consider each of the statements for one minute. Tell students to stand near the statement that reflects mostly their thoughts.</li> <li>• Invite students to share with others in their corner why they chose that position. Include evidence in the sharing.</li> <li>• Congratulate students for sharing their different perspectives. Explain that it is important to consider different ways of thinking and to share those thoughts as they learn how to develop their own position.</li> </ul>	<ul style="list-style-type: none"> <li>• Using Four Corners helps students expand their thinking and consider various possibilities about the use and effects of DDT.</li> </ul>
Homework	Meeting Students’ Needs
<ul style="list-style-type: none"> <li>• Read Chapter 14, “Sam Battles Bird Instincts” and complete <b>Learning from Frightful’s Perspective: Chapter 14.</b></li> </ul>	



EXPEDITIONARY  
LEARNING

# Grade 6: Module 4: Unit 2: Lesson 2

## Supporting Materials



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.  
Exempt third-party content is indicated by the footer: © (name of copyright holder). Used by permission and not subject to Creative Commons license.

## Comparing and Contrasting Authors' Presentation Graphic Organizer

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Text 1: Title: “DDT Spray Scares Mosquitoes Away, Study Finds”	Compare and Contrast the Authors' Presentations	Text 2: Title: “You Think You Have It Tough?”
How does the author <b>introduce</b> the article?	How are they similar? How are they different?	How does the author <b>introduce</b> the article?
What claim does the author make?	How are they similar? How are they different?	What claim does the author make?
What type of <b>evidence</b> does the author include?	How are they similar? How are they different?	What type of <b>evidence</b> does the author include?
How does the author use <b>text features</b> (photographs, graphs, diagrams, etc.)?	How are they similar? How are they different?	How does the author use <b>text features</b> (photographs, graphs, diagrams, etc.)?



## Comparing and Contrasting Authors' Presentation Graphic Organizer

**Which article is more effective in its argument? Why?**



Learning from Frightful's Perspective: Chapter 14

Name: \_\_\_\_\_

Date: \_\_\_\_\_

<b>Focus Question:</b> In what ways has Frightful changed from the beginning of the novel until now?	Evidence from the Text:	
	My thoughts about how Frightful has changed:	
<p>Chapter 14: "Sam Battles Bird Instincts"</p> <p><b>Words I Found Difficult:</b></p> <p><b>Glossary:</b> eddy—n. a circular current cupola—n. a small structure built on top of a roof imprinted—v. something caused to stay in your mind permanently (as in memory)</p>		