



EXPEDITIONARY
LEARNING

Grade 6: Module 4: Unit 2: Lesson 4

Research Tasks: New Words, Relevant Information, Revision



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

I can use common Greek and Latin affixes (prefixes and suffixes) and roots as clues to help me determine the meaning of a word (e.g., audience, auditory, audible). (L.6.4b)

I can conduct short research projects to answer a question. (W.6.7)

I can use several sources in my research. (W.6.7)

I can refocus or refine my question when appropriate. (W.6.7)

I can gather relevant information from a variety of sources. (W.6.8)

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

I can quote or paraphrase what others say about my topic while avoiding plagiarism. (W.6.8)

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

Supporting Learning Targets

- I can use affixes to help me determine the meaning of unfamiliar words.
- I can gather relevant information from my research materials.
- I can revise my research question if necessary.

Ongoing Assessment

- Learning from Frightful's Perspective: Chapter 15 (from homework)
- Research vocabulary
- Researcher's notebook, Source 2



Agenda	Teaching Notes
<ol style="list-style-type: none"> 1. Opening <ol style="list-style-type: none"> A. Engaging the Reader: Learning from Frightful's Perspective (8 minutes) B. Unpacking Learning Targets (2 minutes) 2. Work Time <ol style="list-style-type: none"> A. Affixes: Using Prefixes and Suffixes to Determine Word Meaning (10 minutes) B. Reading Second Research Text (20 minutes) Closing and Assessment 3. Closing and Assessment <ol style="list-style-type: none"> A. Refocusing Our Research Question: How Might a Text Change the Direction of Our Research? (5 minutes) 4. Homework <ol style="list-style-type: none"> A. Read Chapter 16, "Frightful and Oksi Run the Show" and complete Learning From Frightful's Perspective: Chapter 16. 	<ul style="list-style-type: none"> • Students' ability to successfully read source text is affected by how well students understand the text and whether they are interested in the text. In this lesson, time is dedicated to be sure students understand the terminology, with a particular focus on using Greek and Latin affixes, or prefixes and suffixes. Identifying and using prefixes and suffixes to determine word meaning offers students a guide for understanding text (in the Paul Müller article, students focus particularly on words with common affixes). • In previous lessons, students used the researcher's notebook to gather notes while thinking about the research question: "Do the benefits of DDT outweigh its harmful consequences?" They read "Rachel Carson: Environmentalist and Writer" and recorded source information, claims, or central ideas and details or evidence. After recording information from the articles, the credibility of the source was evaluated. Students weighed whether the article helped them consider the research question and think of new questions relevant to their claim about DDT. In this lesson, students apply those skills as they read a new article, "Malaria Carrying Mosquito Crash Lands Due to His Insecticide," about Paul Müller. • Students also have had practice completing the researcher's notebook; in Lesson 2, they filled in Source 1 for the "Rachel Carson: Environmentalist and Writer" article, with you modeling for them. Now they must apply those sourcing skills with increased independence: they work in triads to identify source information, claims or ideas, and details or evidence from the article about Paul Müller. • In this lesson, challenge students to read closely for information on both sides of the argument about the use of DDT. Continue to emphasize that different perspectives or ideas help develop thinking. • In advance: Review the Affixes Resource. Read "Malaria Carrying Mosquito Crash Lands Due to His Insecticide" for the gist, source information, claims or ideas, and evidence. • Post: Learning targets.



Lesson Vocabulary	Materials
affixes, relevant, revise; prefixes, suffixes; ecology, environmentalist, chemist, pesticide, typhus, plague, disinfectant	<ul style="list-style-type: none">• <i>Frightful's Mountain</i> (book; one per student)• Document camera• Affixes Resource (one per student)• Research Vocabulary graphic organizer (one per student)• Research folder (from Lesson 1)• "Malaria Carrying Mosquito Crash Lands Due to His Insecticide" (from Lesson 1; in research folder)• Researcher's notebook, Source 2 (from Lesson 1; one per student; in research folder)• Learning from Frightful's Perspective: Chapter 16 (one per student)



Opening	Meeting Students' Needs
<p>C. A. Engaging the Reader: Learning from Frightful's Perspective (8 minutes)</p> <ul style="list-style-type: none">• Be sure students have their text, <i>Frightful's Mountain</i>.• Compliment students for joining their triads to share their responses to the Learning from Frightful's Perspective focus question for Chapter 15, "A Pal Finds a Pal." Encourage students to use evidence that explains what challenges characters in this chapter faced, and how they faced those challenges.• Ask students to share with their triad a word they added to their "Words I Found Difficult" list. Remind students to include the page number it was found on and a brief definition of the word on the list. As usual, encourage group members to collaborate and use context clues to determine the words' meanings.• Circulate to observe students' shared and written responses. Make note of students who begin work easily and collaborate with triad members and those who may need support.• Refocus students whole group. Cold call them to share their evidence-based responses to the focus question. Listen for responses that include evidence such as: Sam was not a licensed falconer; the two little eyases were registered in Albany and under protection of the U.S. government; they will be raised by a registered falconer.• Emphasize that using evidence to answer questions and share information can be an important part of raising new thoughts.	<ul style="list-style-type: none">• Direct students to the last five pages of Chapter 15 to help find evidence for the focus question response.
<p>D. B. Unpacking Learning Targets (2 minutes)</p> <ul style="list-style-type: none">• Read aloud, or invite a student to read aloud, today's learning targets.<ul style="list-style-type: none">* "I can use affixes to help me determine the meaning of unfamiliar words."* "I can gather relevant information from my research materials."* "I can revise my research question if necessary."• Ask students to identify what words in the learning targets they think are most important. Listen for "affixes," "relevant," and "revise." Circle or highlight those words.• Ask:<ul style="list-style-type: none">* "Looking at words that might be unfamiliar or not known—how do you think you find the meaning of new words?"• Listen for responses that include using context clues, dictionaries, or parts of words like prefixes. Tell students that part of the work time involves using parts of words to help figure out what they mean.	



Work Time	Meeting Students' Needs
<p>A. Affixes: Using Prefixes and Suffixes to Determine Word Meaning (10 minutes)</p> <ul style="list-style-type: none"> • Display (using a document camera) and distribute the Affixes Resource. • Invite students to look at the title of the chart. Point out that “Prefixes and Suffixes” is a subtitle below the title. Explain that affixes are letters or syllables attached to a word. They are added to change the word’s function or meaning. • Call on students to identify each of the column titles and what they notice in each column. • Tell students they will use the Affixes Resource to help them determine the meaning of new words. Explain that the chart has many commonly used affixes but not all. The meaning of other affixes can also be found in dictionaries. Encourage students to add new prefixes and suffixes when they notice them in their reading. • Explain that reading articles for research often includes new words. Learning how to pronounce new words and learning the meanings helps understand text. Many new words have been introduced in the articles they have read as they continue with research about the benefits and harmful consequences of DDT. • Distribute the Research Vocabulary graphic organizers to each student. • Use the document camera to display the words <i>ecology</i>, <i>environmentalist</i>, <i>chemist</i>, and <i>pesticide</i>. Tell students that these are words they have read in the Rachel Carson articles or may read today in a new article. Tell them that each of these words has important root words, prefixes, and/or suffixes. • Model writing the word <i>ecology</i> on the Research Vocabulary graphic organizer. Ask students to add the word to their graphic organizer and circle what part of the word they think is a prefix or suffix. Ask students to look at the Affixes Resource to find what they circled. • Ask students to think about what the word means and then share their meaning with their partner. Tell students to write what they think the word means on their graphic organizer. Call on students to share their definition with the class. Listen for responses like: “a study of the environment” or “a science that studies living things and the environment.” • Use the document camera to write the words <i>environmentalist</i>, <i>chemist</i>, and <i>pesticide</i> on the Research Vocabulary graphic organizer. Ask partners to identify prefixes and/or suffixes and root words. Use the Affixes Resource to find the affixes and their meanings to help them determine the word’s meaning. • Students should then record meanings on the graphic organizer as well as which strategy helped them determine the meaning. 	<ul style="list-style-type: none"> • This lesson builds familiarity with the structure of words or parts of words. Learning prefixes and suffixes helps students determine what a word means or how the function of a word changes. • Consider partnering ELL students who speak the same language. This can allow them to have more meaningful discussion as they work to determine meaning. • For some students, consider providing words that are frequently used in the research articles and/or share the same affix. For example, words like “pesticide,” “insecticide,” and “herbicide” have the same suffix and a root word. This may contribute to identifying meaning and practicing the skill of using affixes to determine meaning.



Work Time	Meeting Students' Needs
<ul style="list-style-type: none"> • Call on students or partners to share their meanings they thought of. Listen for responses like: <ul style="list-style-type: none"> – Ecologist: “a person who studies the environment” – Chemist: “someone who studies or works with chemicals” – Pesticide: “something that kills pests” • Encourage students to use that strategy to help them understand new words more easily; other strategies will be used in the next lesson. Tell students that having multiple strategies for understanding new words allows them to understand complex texts, which leads to a deeper understanding of important topics. • Ask students to put their Research Vocabulary graphic organizers in the research folder. Encourage them to keep their Affixes Resource to use for Work Time B. 	
<p>B. Reading Second Research Text (20 minutes)</p> <ul style="list-style-type: none"> • Distribute or ask students to take the article “Malaria Carrying Mosquito Crash Lands Due to His Insecticide” and their researcher’s notebook from their research folder. • Ask students to turn and talk: <ul style="list-style-type: none"> * “How did we use this research notebook when we read about Rachel Carson?” Listen for students to make connections to the research question: “Do the benefits of DDT outweigh the consequence?” and to point out that they read articles about Rachel Carson and recorded source information, claims or central ideas, and details or evidence. After recording information from the articles, the credibility of the source was evaluated. Students considered if the article was helpful for considering the research question and thinking of new questions as they considered their claim about DDT. • Tell students they will read a new article that offers more information about DDT. Invite students to look carefully at the article to locate and record source information on the Source 2 page. Ask students to discuss and compare what each of them recorded. Encourage students to edit and change as they learn from each other. • Before reading, introduce students to new scientific words: <i>typhus</i>, <i>plague</i>, and <i>disinfectant</i>. Do not define the words yet. Simply ask students to listen for context clues and consider affixes to determine meaning. • Ask students to read along as you read aloud. 	<ul style="list-style-type: none"> • When reviewing the Research Vocabulary graphic organizer, consider using a document camera for display and to model how to record source information. • Providing models of expected work supports all students, especially challenged learners. • During Work Time B, you may want to support a small group of students in finding claims and evidence in the article. Some students will need more guided practice before they are ready for independent work.



Work Time (continued)	Meeting Students' Needs
<ul style="list-style-type: none">• At the end of the first paragraph, call on students:<ul style="list-style-type: none">* “What does <i>typhus</i> mean? How did you figure it out?”* “What does <i>plague</i> mean? How did you figure it out?”• Note that students likely are relying on the familiar strategy of using context clues, which is fine: not every vocabulary word has a clear prefix or suffix. Ask which category the words should be added to on the Scientific Word Wall. Post those words on the Word Wall in the disease/health category.• Tell students now they have considered some of the key vocabulary in this article, it is time to go deeper with understanding the article as a whole. Invite students to get into triads. Tell students to reread the article. Remind them that a close read helps them identify claims or central ideas and find evidence that supports those claims.• Tell students to identify at least three claims. Each claim should be supported by at least one detail or piece of evidence. Challenge students to read closely for information on both sides of the argument about the use of DDT. Explain that different perspectives or ideas are helpful in developing their own thinking.• Encourage students to pause at the end of each paragraph to consider what claims or ideas and supporting evidence were in that passage. Remind them to paraphrase the claims or ideas and to quote evidence for support.• Circulate to listen and ensure that all students participate in the reading. Support triads in their discussions. Guide students as they identify and record claims by paraphrasing and evidence by writing quotes. Ask probing questions such as:<ul style="list-style-type: none">* “What claim or central idea is presented in the first paragraph?”* “What evidence can you quote to support the claim?”• Refocus students as a whole group. Call on triads to share a claim or idea that they paraphrased and quote a detail or evidence that offers support.• Use a document camera to visually share responses with the whole class. Model ways to improve responses.• Probe students’ thinking about any new ideas or questions this article stimulated. Invite them to share.• Give specific positive praise for behaviors you saw students using that promote effective close reading (if appropriate, connect this back to the Things Close Readers Do anchor chart from Module 1). Continue to emphasize that rereading closely can help generate new thinking about a topic. This is essential when conducting research.	



Closing and Assessment	Meeting Students' Needs
<p>A. Refocusing Our Research Question: How Might a Text Change the Direction of Our Research? (5 minutes)</p> <ul style="list-style-type: none">• Focus students on their researcher's notebook. Ask students to write responses to the two questions at the end of Source 2:<ul style="list-style-type: none">* "Does this source help you to refocus or refine your research question?"* "What are new questions you would like answered before you make your own claim about DDT?"• As time permits, invite students to share out.	
Homework	Meeting Students' Needs
<ul style="list-style-type: none">• Read Chapter 16, "Frightful and Oksi Run the Show" and complete Learning From Frightful's Perspective: Chapter 16.	



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Supporting Materials



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Affixes Resource

Name: _____

Date: _____

Prefixes	Meaning	Example	New Word
anti-	against	antifrost	
bio, bi	life	biology	
de-	opposite	defrost	
dis-	not, opposite of	disagree	
eco-	environment		
en-, em-	cause of	encode, embrace	
fore-	before	forecast	
in-, im-	in	infield, inside	
in-, im-, il-, ir	not	incorrect, impossible	
inter	between	interact	
intro	into, with, inward	introduce	
man, manu	hand, make, do	manicure, manual	
mid	middle	midway	
mis	wrongly	misfire	
non-	not	nonsense	
over-	beyond	overlook	
pre-	before	prefix	



Affixes Resource

Name: _____

Date: _____

Prefixes, cont.	Meaning	Example	New Word
pro-	for, forward	propel	
pre-	before	prefix	
pro-	for, forward	propel	
re-	again	return	
sem-, semi	half	semicircle	
sub-	under	submarine	
super	over or above	superstar	
trans-	across	transport	
un-	not	unfriendly	
under-	below	undersea	



Affixes Resource

Name: _____

Date: _____

Suffixes	Meaning	Example	New Word
-able, -ible	can be done	comfortable	
-al, -ial	having characteristics of	personal	
-cide, -cides	to kill	pesticide	
-ed	past-tense verbs	hopped	
-en	made of	wooden	
-er	comparative	higher	
-er, -or	one who	worker, actor	
-est	comparative	biggest	
-ful	full of	careful	
-ic	having characteristics of	electronic	
-ing	action or process	running	
-ion, -tion	act, process	promotion	
-ist	one that performs an action	cyclist	
-ity, -ty	state of	beauty	
-ive, -ative,	performs an action	active	



Affixes Resource

Name: _____

Date: _____

Suffixes, cont.	Meaning	Example	New Word
-less	without	fearless	
-ly	in a certain manner	quickly	
-ment	action or process	enjoyment	
-ness	state of, condition of	kindness	
-ology	study	zoology	
-ory	relating to, characterized by	memory	
-ous, -eous, -ious	possessing the qualities of	joyous	
-s, -es	more than one	books, boxes	



Research Vocabulary Graphic Organizer

Name: _____

Date: _____

Word from the text	What do you think it means?	What strategy helped you determine the meaning? <small>(CC = Context Clues, A+R = Affixes + Root Words, RM = Resource Material)</small>	What is the dictionary's definition of this word?
1.			
2.			
3.			
4.			

Learning from Frightful's Perspective: Chapter 16

Name: _____

Date: _____

<p>Focus Question: We see several moments in this chapter that show the strong relationships between the characters. What relationships are written about? How do we know they are strong relationships?</p>	<p>Evidence from the Text:</p>	
	<p>My thoughts about the relationships between characters in Chapter 16:</p>	
<p>Chapter 16: "Frightful and Oksi Run the Show"</p> <p>Words I Found Difficult:</p> <p>Glossary:</p> <p>thermal—n. a rising body of warm air</p> <p>hacking porch—n. a board on which a hawk is fed</p>		