



EXPEDITIONARY
LEARNING

Grade 5: Module 2A: Unit 2: Lesson 12

Comparing Two Main Ideas in an Informational Text: Meg Lowman's Methods for Researching the Rainforest (Pages 35–36)



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Comparing Two Main Ideas in an Informational Text:
Meg Lowman’s Methods for Researching the Rainforest (Pages 35–36)

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)	
<p>I can explain what a text says using quotes from the text. (RI.5.1) I can determine the main idea(s) of an informational text based on key details. (RI.5.2) I can summarize an informational text. (RI.5.2) I can determine the meaning of academic words or phrases in an informational text. (RI.5.4) I can determine the meaning of content words or phrases in an informational text. (RI.5.4)</p>	
Supporting Learning Targets	Ongoing Assessment
<ul style="list-style-type: none"> • I can compare and contrast different research methods that Meg Lowman has used. • I can use quotes from the text as evidence in my answers to questions. • I can determine the meaning of new words in <i>The Most Beautiful Roof in the World</i>. 	<ul style="list-style-type: none"> • Journal (Meg Lowman KWL chart, AQUA Biodiversity chart, glossaries) • Text-dependent questions • Four Corners exit ticket



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Agenda	Teaching Notes
<ol style="list-style-type: none"> 1. Opening <ol style="list-style-type: none"> A. Reviewing Homework and Engaging the Reader (10 minutes) 2. Work Time <ol style="list-style-type: none"> A. Guided Practice and Discussion: Comparing and Contrasting Research Methods (20 minutes) B. Group Read: Answering Text-Dependent Questions (15 minutes) C. New Vocabulary Work: Key Vocabulary to Deepen Understanding (10 minutes) 3. Closing and Assessment <ol style="list-style-type: none"> A. Debrief: Four Corners (5 minutes) 4. Homework 	<ul style="list-style-type: none"> • In this lesson, students again work with their regular group of four. • Review: Four Corners strategy (see Appendix). • In advance, prepare four sheets of paper for the Four Corners sheets (see materials note, below).

Lesson Vocabulary	Materials
<p>compare, contrast, methods, quotes, evidence, immense, inflatable, dirigible, pontoons, numerous, qualities, consumed, grueling, lurked (35), gondola, steer, linked, thorough (36)</p>	<ul style="list-style-type: none"> • World Map: Cameroon (one to display) • AQUA Biodiversity anchor chart (from Lesson 4) • <i>The Most Beautiful Roof in the World</i> (book; one per student) • Researching in the Rainforest three-column Note-catcher (one per student and one per group) • Researching in the Rainforest Three-Column Note-catcher (sample answers, for Teacher Reference) • Text-Dependent Questions: Researching in the Rainforest, Pages 35–36 (one per student) • Four Corners sheets: Walkways, Staples, Floating Raft, Crane (to display; see Teaching Note)



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Opening	Meeting Students’ Needs
<p>A. Reviewing Homework and Engaging the Reader (10 minutes) <i>Note: Prominently display the World Map: Cameroon.</i></p> <ul style="list-style-type: none">• Ask students to take out their journals. Ask students to share with a partner their homework from Lesson 11: examples of biodiversity they noted in the poem, the vocabulary words they chose, with what they think the words mean and the context clues used to make these determinations.• Cold call a few students to share out with the class some of their examples of biodiversity and add them to the AQUA Biodiversity anchor chart.• Say: “We have read a great deal about Meg Lowman’s research in the Blue Creek rainforest of Belize. But that is not the only place Meg Lowman conducts her studies. She also travels to different rainforests, found in other parts of the world. Today we’re going to read about how she conducts her research in two other locations, Cameroon and Panama.”• Display the world map. Point out Cameroon (in red). Ask the class: “Is Cameroon a place you would expect to find a rainforest? Why or why not?” Listen for suggestions such as: “Cameroon is located close to the equator, where many other rainforests are located in the world. The areas around the equator are warm and humid, with a lot of moisture (water).”• Remind students where Panama is located on the map. Ask students to turn and talk with a partner about what they remember reading about rainforests in Panama.• Ask a few students to share out whole group.	<ul style="list-style-type: none">• Visuals can help students comprehend questions and discussions. Chart main points in answers and post all questions asked to students.



Comparing Two Main Ideas in an Informational Text:
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Work Time	Meeting Students’ Needs
<p>A. Guided Practice and Discussion: Comparing and Contrasting Research Methods (20 minutes)</p> <ul style="list-style-type: none"> • Ask students to join in their usual (for much of this unit) groups of four. Introduce the learning target: “I can compare and contrast different research methods that Meg Lowman has used.” • Ask several students to share out the meaning of the words <i>compare</i> (identify similarities) and <i>contrast</i> (identify differences). • Bring students’ attention to the word <i>methods</i>. Ask for suggestions about the meaning of this word. Listen for definitions such as: “ways to do things; process; techniques; system,” etc. • Direct students to turn to page 35 of <i>The Most Beautiful Roof in the World</i>. It begins with, “In Cameroon there ...” Say: “As I read these pages aloud, think about the following question: How does Meg Lowman’s research in Cameroon and Panama <i>compare</i> or <i>contrast</i> to her work in Blue Creek?” • Read aloud pages 35–36 as students follow along silently. • Give students 2 minutes to think on their own, and then briefly discuss the question with their group. • Invite several students to share out whole group. Listen for statements such as: “She uses an inflatable raft or construction crane instead of walkways; she researched the emergent tops of trees instead of columns from the floor to the understory; she is studying leaves and plants in these places too,” or similar ideas. • Explain to students that they now will reread small chunks of the text on their own. Their purpose is to look for the details that describe the research methods Meg Lowman uses in Cameroon and Panama. • Give students 3 to 4 minutes to first read paragraph 1 on page 35 (“In Cameroon there were no walkways...” through “... leaves in the middle of the crowns or within the canopy itself.”) • Then discuss: <ul style="list-style-type: none"> * “How did Meg Lowman conduct her research in Cameroon?” • Next, allow students 3 to 4 minutes to read the last paragraph on page 36. (This runs from “In Panama, at another site” through “... she found a single vine could lace together sixty-four different canopy trees.”) • Then discuss: <ul style="list-style-type: none"> * “How did Meg Lowman conduct her research in Panama?” 	<ul style="list-style-type: none"> • When possible, provide text or materials in students’ L1. This can help students understand materials presented in English. • Students needing additional supports may benefit from partially filled-in graphic organizers. • ELL language acquisition is facilitated by interacting with native speakers of English who provide models of language.



Comparing Two Main Ideas in an Informational Text:
Meg Lowman’s Methods for Researching the Rainforest (Pages 35–36)

Work Time (continued)	Meeting Students’ Needs
<ul style="list-style-type: none"> • Display the Researching in the Rainforest three-column Note-catcher and distribute one per student plus one sheet per group to fill out collectively. • Explain to students that they will work with their group members to fill out their own Note-catchers and then work together to gather the information onto one form. Students will have to look back at pages 14–15 to remind themselves of how Meg gets to the canopy in Belize (8–10 minutes). • Let students review the Note-catchers. Clarify any directions as necessary. • Circulate to support as needed. • After students have completed their charts, invite several students to share out the details they recorded whole group. • Now that students have examined the text more closely, once again pose the question: “How is Meg Lowman’s research in Cameroon and Panama different or similar to her work in the Blue Creek rainforest of Belize?” • Invite several students to share new ideas whole group. 	<ul style="list-style-type: none"> •
<p>B. Group Read: Text-Dependent Questions (15 minutes)</p> <ul style="list-style-type: none"> • Introduce the learning target: “I can use quotes from the text as evidence in my answers to questions.” • Ask several students to remind the class of the meaning of the words <i>quotes</i> (dialogue or speaking parts in a book, surrounded by quotation marks) and <i>evidence</i> (facts; details from the book; proof). • Distribute the Text-Dependent Questions: Researching the Rainforest, Pages 35–36 (one per student). • Ask students to read through the questions as a group and then work together to go back to pages 35–36 to find answers. After they have talked as a group, remind students to record answers on their individual Text-Dependent Questions: Researching the Rainforest, Pages 35–36. • Move throughout the room to offer support or clarification. Continue to remind students to go back into the text to find evidence. • Once students have completed their answers, cold call a few to share their responses with the whole group. • Ask students to hold on to their sheets; they will revise them during the next part of the lesson. 	<ul style="list-style-type: none"> • ELLs may be unfamiliar with Tier 2 vocabulary words (e.g., <i>use, text, answers, questions</i>). Clarify vocabulary with students as needed. • Consider giving students who struggle with language fewer questions. • Consider providing extra time for tasks and answering questions in class discussions. Some students need more time to process and translate information.



Comparing Two Main Ideas in an Informational Text:
Meg Lowman’s Methods for Researching the Rainforest (Pages 35–36)

Work Time (continued)	Meeting Students’ Needs
<p>C. New Vocabulary Work: Key Vocabulary to Deepen Understanding (10 minutes)</p> <ul style="list-style-type: none">• Students remain in groups. Introduce the learning target: “I can determine the meaning of new words in <i>The Most Beautiful Roof in the World</i>.”• Ask students to share out a few strategies that they use to determine the meaning of new words. Listen for strategies such as: “use context clues; break the word into familiar parts; look at pictures on the page for clues,” etc.• List the following words on the board:<ul style="list-style-type: none">* immense, inflatable, dirigible, pontoons, numerous, qualities, consumed, grueling, lurked, gondola, steer, linked, thorough• Remind students of the game Charades (from Module 1). Explain that each member of the group will choose a word from this list to silently perform for their group members to guess. Each member of the group should get a turn to act out at least one word. Clarify instructions as necessary.• Give the class 2 to 3 minutes to play Charades. Circulate to support as needed.• After students have acted out their words, review the following terms whole group. Ask several students to share out the meaning of the following words:<ul style="list-style-type: none">* <i>immense</i>: huge; enormous* <i>inflatable</i>: can be filled with air* <i>dirigible</i>: blimp; airship* <i>pontoons</i>: floating supports* <i>numerous</i>: many; a large number of* <i>qualities</i>: characteristics; traits* <i>consumed</i>: eaten; used up* <i>grueling</i>: difficult; terrible; hard* <i>lurked</i>: lay in wait; prowled* <i>gondola</i>: cable car; wide-mouthed traveling container	<ul style="list-style-type: none">• Students needing additional supports may benefit from partially filled-in Double Bubble maps.• Consider allowing students who struggle with written language the opportunity to dictate their ideas to a partner or teacher.• Consider providing extra time for tasks and answering questions in class discussions. Some students need more time to process and translate information.



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Work Time (continued)	Meeting Students' Needs
<ul style="list-style-type: none">* <i>steer</i>: guide; turn; maneuver* <i>linked</i>: connected; joined* <i>thorough</i>: careful; systematic; detailed• Then give students 1 to 2 minutes to work with group members to revise their answers to the text-dependent questions, based on new understandings.• As time allows, invite several students to share out answers their group revised and how they applied any new understandings about vocabulary to improve their responses.• Collect students' text-dependent questions sheets. Read over to informally assess students' ability to respond to the questions using key words and details from the text.	<ul style="list-style-type: none">•



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Closing and Assessment	Meeting Students’ Needs
<p>A. Debrief: Four Corners (5 minutes)</p> <ul style="list-style-type: none"> • Post the Four Corners sheets in different corners or areas of the room: Walkways, Staples, Floating Raft, Crane (see Teaching Note). • Bring the entire class together. Say: “You have read about the ways that Meg Lowman conducts research in the rainforest. Now you are going to ‘vote’ for your favorite method by participating in Four Corners. The four choices are: walkways, staples, floating raft, or crane.” • Direct students’ attention to the four categories listed around the room. Ask students to move to the corner for the method they choose. • Once students are in corners, ask them to talk with other students in that corner: <ul style="list-style-type: none"> * “Why did you choose this as your favorite method of research?” • Encourage students to refer to specific details (text or pictures) from the book to justify their method selection. Invite a few students to share out. 	<ul style="list-style-type: none"> • For students needing additional supports producing language, consider offering a sentence frame, sentence starter, or cloze sentence to provide the structure required.
Homework	Meeting Students’ Needs
<ul style="list-style-type: none"> • Reread pages 35–36 to someone (or yourself) at home. • Add any new learning about Meg Lowman to the Meg Lowman KWL chart in your journal. • Add any new understandings about biodiversity to the AQUA Biodiversity chart in your journal. • Add three words reviewed in class today to one of your glossaries. Choose from this list: compare, contrast, methods, quotes, evidence; immense, inflatable, dirigible, pontoons, numerous, qualities, consumed, grueling, lurked (35), gondola, steer, linked, thorough (36). 	<ul style="list-style-type: none"> • Audio recordings of text can aid students in comprehension. Students can pause and replay confusing portions while they follow along in the text. • For students who may have difficulty determining important words to add to their glossaries, consider prioritizing the following words for them: <i>methods, evidence, numerous.</i>



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Supporting Materials



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World Map: Cameroon



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Researching in the Rainforest Three-Column Note-catcher
(Focus on pages 35-36 of *The Most Beautiful Roof in the World*)

Country	Research Method	Text That Describes the Research Method
Cameroon		
Panama		
Belize		



Researching in the Rainforest Three-Column Note-catcher
(Focus on pages 35-36 of *The Most Beautiful Roof in the World*)
(For Teacher Reference)

Country	Research Method	Text That Describes the Research Method
Cameroon	Inflatable raft (with dirigible)	Dirigible floats raft over canopy Raft settles on emergent crowns of canopy Hang over sides of raft on pontoons held by ropes Walk along pontoons
Panama	Construction crane (gondola)	Swings through the canopy on the crane Stands in gondola next to radio crane operator so he could steer her where she wanted to go
Belize	Walkways	Puts on a safety harness Climbs the metal ladders Climbs the staples (footholds) Clips the safety lines to the wires with each step Swings onto the platform



Text-Dependent Questions: Researching the Rainforest, Pages 35–36

1. According to the text, what is a *dirigible*? Support your answer with evidence from the text.

2. The author states, “As fun as this giant trampoline in the sky was, working from it was also *grueling*.” What does the word *grueling* mean in this sentence? Support your answer with evidence from the text.

3. On page 36, the author describes how when Meg Lowman stepped into a battalion of army ants, she *screamed bloody murder*. What does the expression *screamed bloody murder* mean? Why did Meg do this? Support your answer with evidence from the text.



Text-Dependent Questions: Researching the Rainforest, Pages 35–36

1. According to the text, what is a *dirigible*? Support your answer with evidence from the text.

A dirigible is like a blimp and is used to carry the inflatable raft to the canopy; the text says, “There was an immense inflatable raft that a dirigible floated over the rainforest canopy.” In the photograph above the paragraph, there is a picture of a blimp above the trees.

2. The author states, “As fun as this giant trampoline in the sky was, working from it was also *grueling*.” What does the word *grueling* mean in this sentence? Support your answer with evidence from the text.

Very hard or difficult; the text states it was grueling, then goes on to say the “sun slammed down on scientists like a sledgehammer,” and that temperatures reached 120 degrees every day.

3. On page 36, the author describes how when Meg Lowman stepped into a battalion of army ants, she *screamed bloody murder*. What does the expression *screamed bloody murder* mean? Why did Meg do this? Support your answer with evidence from the text.

It means to scream loudly; text says she “woke the entire camp” and that everybody thought that she had been bitten by the poisonous Gabon viper.



Walkways

Staples



**Floating
Raft**

Crane