

Grade 5: Module 2A: Unit 1: Lesson 7
Analyzing Documentary Videos: "Great Bear
Rainforest Remote Camera Project" British
Columbia, Canada





"Great Bear Rainforest Remote Camera Project" British Columbia, Canada

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

I can summarize information that is presented in video. (SL.5.2)

I can determine the main idea(s) of an informational text based on key details. (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)

I can compare and contrast the organizational structure of different informational texts. (RI.5.5)

Supporting Learning Targets	Ongoing Assessment
 I can explain the main idea of a documentary video on researching in the rainforest. I can determine the meaning of new words from context in a documentary video about researching in the rainforest. 	 Journal (page for video, Rainforest KWL chart, Informational Texts chart(s), and glossaries) Exit ticket
 I can analyze the features of a documentary video as informational text. I can compare and contrast the features of an interview, an article, and a documentary video. 	



Agenda	Teaching Notes	
1. Opening	• Preview the video: "Great Bear Rainforest Remote Camera Project" from http://vimeo.com/9433768 .	
 A. Engaging the Reader: Rainforest of British Columbia, Canada (5 minutes) B. Review Types of Informational Text (5 minutes) 2. Work Time A. First View: Getting the Gist of What Scientists Are Researching in the Great Bear Rainforest (15 minutes) B. Second View: Determining the Meaning of Words in Context (15 minutes) C. Third View: Documentaries as Informational Text (10 minutes) 	 Please bear in mind that Youtube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. While some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links, and/or use a filter service, such as www.safeshare.tv, for actually viewing these links in the classroom. During this lesson, students view this short video three times. During the first two viewings, the video is paused at key points to give students time to think, talk, and write about what they just saw and heard. Read the video transcript (in supporting materials) in order to know when to pause the video during instruction. In advance: Ensure that all technology is working properly. Review: Glass, Bugs, Mud (Appendix 1). Students will be watching a documentary video in this lesson. Some students may need to read a 	
3. Closing and Assessment	transcript as they are watching the video (see supporting materials).	
A. Debrief: What Have We Learned about the Rainforest? (10 minutes)		
4. Homework		



Lesson Vocabulary	Materials
documentary, main idea, analyze, compare, contrast, temperate, terrestrial/marine ecosystems, field of view, track, behavior, remote, species, indicates, range, monitor, nocturnal, presence, threat, talon, insight, carnivores, behavior, conservationists, traditional, methods, habituating, poaching, trophy hunting, disadvantage, noninvasive, documented, preying, inaccessible	 Political Map of the World (from Lesson 2) Map of North and South America (from Lesson 2) Informational Text anchor chart (from Lesson 2) Transcript: "Great Bear Rainforest Remote Camera Project" (for Teacher Reference) Video: "Great Bear Rainforest Remote Camera Project" (see link in supporting materials) Sticky notes Rainforest KWL anchor chart (from Lesson 1) Features of Informational Text anchor chart (from Lesson 3) Homework: Venn Diagram Comparing the Features of Two Types of Informational Text (one per student)



Opening	Meeting Students' Needs
 A. Engaging the Reader: Rainforest of British Columbia, Canada (5 minutes) Explain to students that they will be learning about research in another rainforest, the Great Bear Rainforest in British Columbia, Canada. 	•
• Show students the Political Map of the World or the Map of North and South America (both from Lesson 2). With your finger, draw an invisible line on the map from New York to British Columbia, Canada. Ask students to locate the British Columbia rainforest in relation to the other rainforests they have studied:	
• "Where is Panama?" "Where is Hawaii?" "Where is the British Columbia rainforest located in relation to both Panama and Hawaii?" Listen for students to state: "to the north/northwest/northeast," etc.	
• Ask students to Think-Pair-Share:	
• "What are you noticing about where rainforests are located around the world?" Invite a few partners to share their thinking. Listen for comments such as: "Most rainforests are close to the equator, but not the one in British Columbia." Remind students that this is because there are different types of rainforests and that the basic definition of a rainforest is a forest that gets a certain amount of rainfall per year. The majority of the areas that receive the most rainfall in the world are close to the equator. But not all.	



"Great Bear Rainforest Remote Camera Project" British Columbia, Canada

Opening (continued) Meeting Students' Needs

B. Review Types of Informational Text (5 minutes)

- Remind students that they are learning about different ways that scientists communicate their research about rainforests. Scientists use a wide range of informational texts to inform people about their research.
- Direct students' attention to the **Informational Text anchor chart**. Ask students to think about what types of informational texts they have already read. Cold call a few students for responses (interview and article).
- If *documentary video* is not already listed on the anchor chart, add it. Ask students to Think-Pair-Share: "What makes a video informational?" Listen for comments such as: "It has facts," "Experts share information," "shows real places/things," etc. Invite a few students to share something their partner said.
- Use this as an opportunity to teach academic vocabulary. Ask students what root word they see in the word *documentary*. Explain the meaning of "document" in this context: facts or information. Provide clarification for students about what a *documentary* is: a film or TV program about history, science, or other topics that provides factual information. Documentaries often include interviews. (If appropriate, note that documentaries are supposed to be unbiased, yet often do in fact present the filmmakers' opinion.) Make sure to discuss with students that not all videos are considered informational text.
- Consider partnering an ELL with a student who speaks the same L1 when discussion of complex content is required. This can let students have more meaningful discussions and clarify points in their L1.
- All students developing academic language will benefit from direct instruction of academic vocabulary.



Work Time	Meeting Students' Needs	
 A. First View: Getting the Gist of What Scientists Are Researching in the Great Bear Rainforest (15 minutes) Review the learning target: "I can explain the main idea of a documentary video on researching in the rainforest." Invite several students to share out what main idea means, listening for students to say that it is the same as getting the "gist," and/or what something is mainly about. 	 Some students may be unfamiliar with Tier 2 vocabulary words (e.g., explain, video, researching). Clarify vocabulary with students as needed When playing videos, use the English subtitles or a transcript of the text if available. Providing a visual can assist struggling learners in understanding the content of the video. 	
• Explain to students that they will view another type of informational text, a documentary video, to learn more about the work of scientists in the Great Bear Rainforest.		
• The video is almost 7 minutes long. Tell students that they will watch the video several times, just like they have been doing with their reading.		
• The first time they watch the video, they will focus on gist.	video.	
• For this first view, they will watch six shorter segments or "chunks" (they have also done this as readers). After each chunk, they will think, talk, and write, recording a gist statement about what they heard and saw.		
•		
Note: See Transcript: "Great Bear Rainforest Remote Camera Project" (in supporting materials) for pause points in the video.		
Help students prepare for taking notes:		
* Ask students to begin a new page in their journals to write their gist statements. They will write six gist statements total.		
* Tell students to leave space on their page after each gist statement, since they will be adding other notes about each video segment later.		
Place students in triads.		
• Begin showing the documentary video "Great Bear Rainforest Remote Camera Project."		
• At each pause point, give students a moment to think, briefly discuss in triads what the gist of the video segment was, and then record individual gist statements in their journals.		



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Work Time (continued)

B. Second View: Determining the Meaning of Words in Context (15 minutes)

- Review the learning target: "I can determine the meaning of new words from context in a documentary video about researching in the rainforest." Remind students that they have worked with this target several times before with written texts. Ask students to share what they know about how to determine the meaning of words using the context of the text. Listen for suggestions such as: "You look at the parts of words or the words around it in the same sentence or other sentences." Remind students of the strategies they have been using to determine the meaning of unknown words, such as using context clues; breaking the word into smaller parts; identifying parts of the word that they may already know, etc.
- Tell students that they will now watch the video again (just like rereading difficult written text). This time, they will listen carefully for words about what and how these scientists are learning in the Great Bear Rainforest. Tell them that each time the video is paused, they should write down specific words in their journal, underneath the gist statement for that segment of the documentary.
- Play the video again. As before, pause after each of the six segments so students have time to think and write down their words. Remind students that they can also write down any unknown and/or confusing words heard in the video so they can come back to them to determine meaning from context. Explain that they do not have to know how to spell the words at this time.
- Give students time to share with their triad. Then invite triads to share out the words they chose from the video, listening for words listed in the vocabulary section of this lesson. Move throughout the room to offer support to students as necessary, paying close attention to students' understanding of vocabulary. It might be necessary to replay sections of the video to hear the context of the words again.

Meeting Students' Needs

- Provide anchor charts for processes, such as How to Determine the Meaning of Words from Context. This would include question words with nonlinguistic representations and a question frame.
- Consider providing smaller chunks of text (sometimes just a few sentences) for some students.
 Teachers can check in on students' thinking as they write or speak about their text.
- Visuals can help students comprehend questions and discussions. Chart main points in answers and post all questions asked to students.



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Work Time (continued)

C. Third View: Documentaries as Informational Text (10 minutes)

- Introduce the learning targets: "I can analyze the features of a documentary video as informational text," and "I can compare and contrast the features of an interview, an article, and a documentary video." Ask students to remember what it means to analyze. Listen for responses such as: "study closely," "examine," "evaluate," explore," etc. Also ask students to review the meaning of the words *compare* (identify similarities) and *contrast* (identify differences).
- Focus students' attention on the **Features of Informational Text anchor chart**. Ask several students what is meant by "features of a video," listening for students to share ideas, such as: "how a video looks/sounds," "how information is shared in a video," or similar ideas.
- Give each student three **sticky notes**. Explain that as they watch the full video a third time, they will *analyze* the features of a documentary video as a type of informational text. They will use the sticky notes to write down informational text features they notice in the video.
- Play the video again, this time without pausing, as students record their observations on their sticky notes.
- · Ask students to talk with their triad:
 - * "What features did you notice?"
 - * "What types of oral and visual clues in the video helped you understand what scientists were trying to communicate?"
- Listen to groups' conversations for ideas, such as "The narrator introduced an idea, and then the scientist went into more detail," "There was a lot of video footage of the animals and their habitat/the scientists setting up cameras/viewing the footage," "I could hear what the experts were saying, rather than just reading the words; repeated important information/words," "I could see what the scientists and animals were doing," etc.
- Cold call members from each triad to share out ideas with the class. Chart students' ideas on the Features of Informational Text anchor chart. In the left-hand column, write the phrase "documentary video." In the right-hand column, add students' ideas about features of an informational video. Ask students to write these same notes in their anchor chart in their journals.

Meeting Students' Needs

- Giving features of informational text already written on sticky notes for students to choose from when looking for features in the video would allow for full participation of students who struggle with multiple tasks at one time.
- ELL language acquisition is facilitated by interacting with native speakers of English who provide models of language.



Closing and Assessment	Meeting Students' Needs
 A Debrief: What Have We Learned about the Rainforest? (10 minutes) Ask triads to discuss the following questions: "What type(s) of technology did they use to track wildlife?" "What types of wildlife were they tracking?" "What were they able to learn about the wildlife, using this technology?" Remind students to justify their responses to these questions by referring directly back to the words from the video. Circulate to support individuals and groups, as necessary. Direct students' attention to the Rainforest KWL anchor chart. Ask each triad to share out one or two ideas they want to add about what they have learned about rainforests from their discussions to the L column of the anchor chart. Students should record these ideas in the L column of their journal KWL as well. Review learning targets: "I can explain the main idea of a video on researching in the rainforest," and "I can compare and contrast the features of an interview, an article, and a video." Ask students to use the Glass, Bugs, and Mud strategy to indicate their level of mastery toward meeting these two targets. Distribute Homework: Venn Diagram Comparing the Features of Two Types of Informational Text. 	Consider providing extra time for tasks and answering questions in class discussions. Some students need more time to process and translate information.
Homework	Meeting Students' Needs
• Choose two of the informational texts examined so far (interview, article, and/or video) and complete the Venn diagram comparing and contrasting the features of these different types of informational text.	Consider allowing students to draw their observations, ideas, or notes when appropriate. This allows all students to participate in a meaningful way.



Grade 5: Module 2A: Unit 1: Lesson 7 Supporting Materials





Transcript: Great Bear Rainforest Remote Camera Project

(For Teacher Reference)

Note: times to pause video during the first viewing

"Great Bear Rainforest Remote Camera Project"

http://vimeo.com/9433768 by Twyla Roscovich February 13, 2010

0:01-1:30

Narrator: Located on the western edge of the North American continent exists one of the last great wilderness regions of its kind: the Great Bear Rainforest, the largest expanse of temperate old growth rainforests left on the planet.

Here, where the land meets the sea, terrestrial and marine ecosystems are intertwined, creating one of the most biologically rich areas in the world. Yet, because of its remote nature this region and its wildlife still harbor many mysteries.

A group of engineers, biologists, and filmmakers have developed a new way to gain insight into the inner workings of this secretive coastal rainforest.

Ian McAllister (Pacific Wild director): Well, for nearly two decades we've been trying to really further our understanding of predator/prey relationships in particular in these remote salmon rivers of the Great Bear Rainforest. What we've realized now is that there's far more going on these wild river systems than we're capable of observing firsthand. So what we are doing now is deploying a new generation of wireless video cameras in these remote areas, and we are extremely excited about it because we hope to uncover feeding behavior, inter-species relationships that has not been recorded previously.

1:30-2:19

Andrew Wright (Field Crew engineer): So we've got the first system down here, this is one of our high-end cameras. What's superb about them is they have a 360-degree field-of-view on a horizontal plane and 180 in the vertical plane, so we can pretty much look at any angle, so it gives us huge flexibility. So it's very exciting because we can spot the wolves as long as they're in our field of view; and follow them, track them, pan, tilt, and zoom, watching their behavior, which is just so exciting because we now know just 150 feet from where we had the camera last night, we've located their prime feeding ground. So next step get the camera up and get situated for tomorrow's footage-tomorrow evening's footage, I should say.



Transcript: Great Bear Rainforest Remote Camera Project

(For Teacher Reference)

Note: times to pause video during the first viewing

Narrator: The remote cameras are placed in areas of high wildlife activity. This season they're focusing on salmon rivers, as this is where many of the species will come to feed. The field crew knows what to look for when placing cameras, as each species leaves behind its own unique clues. A headless salmon indicates that wolves are in the area. Once the cameras are installed, the crew heads back to the boat to set up the radio receivers, and then wait and watch.

Farlyn Campbell (Field coordinator): This is one of the radios that will be receiving video signal from one of the cameras that's set up in the roof up there.

Andrew Wright (Field Crew engineer): So, we have three cameras set up. We're just taking a quick look around the stream here to see what's going on. The nifty thing is we've got the complete field of view of everything that's going on in or near the stream. So that shot is from about 100 yards away; there's a very big, dynamic range on the zoom, which is huge.

3:28-4:22

Narrator: The cameras are equipped with infrared technology, allowing the crew to monitor the river valley 24 hours a day. Tonight they are testing the cameras. They're hoping that this night-vision will open up new levels of insight into the lives of nocturnal animals like the wolves.

(Young scientists and Andrew Wright making various comments about what they see on video, "It's coming right up; there it is," etc.; watching the wolf fish a salmon out of the stream, "Wow! That is beautiful." "Pretty cool, pretty cool.")

Narrator: 24 hours a day, the cameras catch everything that moves through the river valley.



Transcript: Great Bear Rainforest Remote Camera Project
(For Teacher Reference)

Note: times to pause video during the first viewing

4:22-5:25 | **Narrator:** Back on the boat, the crew takes turns keeping watch on the cameras.

Farlyn Campbell (Field coordinator): "You never get to watch wildlife just doing their thing. No matter how quiet you are, you always have some presence there that they'll be watching. They know you're there. They're always going to be looking back at you and making sure you're not a threat. It's exciting just for me 'cause, yeah, I've spent a lot of time watching eagles, but never got to just get a good look at them like this. So they always (go away) when you get too close. So it makes you look at the world differently, like how everything is affected by our presence; and it's completely changed, so the eagle doesn't even know we're looking at it, so it's not trying to deal with our presence. So, once I zoom in you can really see its tongue and (its) eye, its big talon. Oh, look at its talons.... They're huge. It just gives you a little insight into their life."

5:25-6:48

Ian McAllister (Pacific Wild director): So this is our first season, it's a pilot season. But we've already noticed from observing wildlife, especially large carnivores, that they're completely unaware of the cameras, and they're acting in a way that we've never been able to observe before by our physical presence changing their behavior. As conservationists and researchers, we really have responsibility to protect wildlife that we're viewing and studying and getting to understand. And one of the problems with traditional research methods is that we frequently are habituating wildlife to human presence, and in an area like this where poaching and trophy hunting is happening, we're really putting these animals at a disadvantage, because how can they tell the difference between somebody carrying a tripod and a camera, and someone carrying a rifle?

So this is using very sophisticated technology to observe wildlife behavior here in a noninvasive way. It's incredible. I mean when you consider the amount of work that's been done in the temperate rainforests, especially up here in British Columbia, yet we've never documented, you know, wolverines preying on salmon, cougars preying on salmon.... There's so much unknown about what goes on up here in these salmon rivers, and we really hope with this camera system, with this new technology, that it's going to open up our eyes to a world that's been previously inaccessible.

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Homework: Venn Diagram Comparing the Features of Two Types of Informational Text

Directions: Choose two of the informational texts you have examined so far (interview, article, and/or video). Complete the Venn diagram, comparing and contrasting the features of these different types of informational text.

