StudySync Lesson Plan
The Quest for the Tree Kangaroo

Objectives

1. Engage students in an exciting scientific expedition in an excerpt from *The Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea*, preparing them to discuss and write critical responses to the text.

2. Practice and reinforce the following Grades 5 ELA Common Core Standards for reading, writing, and speaking and listening:
   - **READING: INFORMATIONAL TEXT RI.5.1-10**
   - **WRITING - W.5.1-10**
   - **SPEAKING AND LISTENING - SL.5.1-6**

Time

130 minutes (with an additional 235+ minutes of extension possibilities)

Materials

SyncTV Premium Lesson on Sy Montgomery & Nic Bishop’s *The Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea*

Overview

The *Scientists in the Field* series is a collection of books about dynamic and exciting adventures in the natural world, whether it’s searching for wild tarantulas, swimming with sharks, or on a grueling expedition through the cloud forests of Papua New Guinea on the trail of the elusive tree kangaroo. Author Sy Montgomery chronicles the search for this unforgettable animal and the continual struggles it faces for survival in *The Quest for the Tree Kangaroo*. Students will read an excerpt from the text, introducing them to this fascinating creature, its habitat, and the researchers on a daring expedition to study it. *The Quest for the Tree Kangaroo* is an engaging text for English learners as well as native speakers, with the power both to inform and entertain. After reading this excerpt, students will participate in class- and group-led discussions and write critical responses consistent with the ELA Common Core Standards for the fifth grade.
Background (10 minutes)

1. **Watch the Preview (SL.5.1-2).** As a group, watch the video preview of the premium lesson. After viewing, use the following questions to spur a discussion:

   a. Where are the cloud forests of Papua New Guinea? What is the climate and geography of the equator? Can you name any of the other “rarest animals on Earth” that the preview is referring to?

   b. Why would scientists undergo a potentially dangerous expedition in search of the Matschie’s tree kangaroo? What do we have to learn or benefit from such discoveries?

   c. What is the meaning of the phrase, “a land that time forgot”? Why is this a good description of the cloud forests of Papua New Guinea? What are some other examples of lands that time forgot?

Extension (additional 60+ minutes)

d. **Field Study (SL.5.1-3).** Organize a class field trip to a local zoo or wildlife preserve. Before your trip, assign each student a different animal to study and learn about. While at the zoo, students should take notes about their animal’s habitat, diet, physical characteristics, behavior, and anything else they might find interesting or unusual. Encourage them also to take photos of the animal while they are there, if permitted, and take them on a guided tour, if possible.

e. **Present (SL.5.4-6).** Following the class field trip, each student should prepare a short in-class presentation about his or her animal. Presentations should include photos and other media wherever appropriate, and students should share what they learned about animals during their field study. Encourage the class to ask each other questions following the presentations, and, if desired, give a short quiz on the students’ presentations to ensure the class is engaged and participating.

f. **Geography (SL.5.1 and W.5.7).** Where is Papua New Guinea? Before they read the excerpt, have students locate Papua New Guinea on a map and research the climate, geography, and ecology of the area. Assign students to share at least one photograph they find of the country, and discuss the photographs as a class. Ask the class: what can we infer based on what we’ve learned?

Engaging the Text (120 minutes)

2. **Read the Text (30 minutes)**

   a. **Read and Annotate (RI.5.1-4, 8).** Have students read and annotate the introduction and excerpt. If students are completing as a homework assignment, ask them to write any questions they have into the annotation tool—these questions are visible to you after the students submit their writing assignments or beforehand if you use the “Mimic” function to access the students’ accounts.

   b. **Discuss (SL.5.1, 3).** Have students get into small groups or pairs and briefly discuss the questions and inferences they had while reading.

Extension (additional 30 minutes)

   c. **Listen and Discuss (SL.5.1-3).** As a class, listen to the audio reading of the text. Ask students to share how their understanding of the text changed after listening.
What additional images came to mind? What words did the author use to develop the setting?

d. **Comprehend** (*RI.5.1-4, 8, 10*). Have students complete the multiple-choice questions. Collect papers or discuss answers as a class.

e. **Illustrate** (*ELL*). Before students look at a photograph of a tree kangaroo, have them use their imaginations—and critical reading skills—to draw pictures based *only* on the details in the excerpt. They should pay attention to every descriptive word in the text and their drawings should be a reflection of this. Use this as a basis for vocabulary building and critical reading comprehension skills.

3. **Watch SyncTV (30 minutes)**

   a. **Watch**. Either watch the SyncTV discussion as a class or ask students to watch it on their individual computers.

   b. **Focus** (*SL.5.1-3 and RI.5.1, 8*). Have your students pay attention to the segment from 3:19-4:01, as the SyncTV students cite various details in the text to help inform their understanding of tree kangaroos. Consider the connotations of each of the words used to describe these creatures, as well as the images and feelings these words evoke.

   c. **Focus** (*SL.5.1-3 and RI.5.1, 8*). A good example of *inferring* can be found from 4:04-4:23, as the instructor helps the SyncTV students draw inferences from the fact that the scientists have never seen a tree kangaroo before.

   d. **Focus** (*SL.5.1-3 and RI.5.4 and ELL*). Finally, focus on the section from 4:26-5:01 as the SyncTV discussion centers around the two distinct definitions of the word *rare,* and how an understanding of the complexities of a word can help deepen students’ understanding of a text.

   e. **Discuss** (*SL.5.1-5 and RI.5.1-4, 8, 10*). After watching the model discussion, have a conversation with the class about the ideas discussed in the SyncTV episode. What new thoughts do they have after hearing the students’ discussion? Next, divide students into small groups (3-4 students). Move around the room monitoring groups as students follow the SyncTV episode as a model to discuss some of the following questions:

   i. Talk about how the author describes the setting in the first two paragraphs of the excerpt. What kinds of nouns and adjectives are used to depict these cloud forests? Make a list of these words, define them, and discuss what they have in common.

   ii. How does understanding both definitions of the word *rare* enhance the meaning of the text? Why are these tree kangaroos both uncommon *and* special, and how are these two ideas linked? Is something uncommon always special? Is something special always uncommon?

   iii. Why do the scientists want to help the tree kangaroo? Why is it important to them? What might they be able to do to help this rare creature?

   iv. “We hope to find the answers,” the author states, “before it is too late.” What are these answers the scientists and researchers are hoping to find, and what does she mean by “too late”? What are some of the difficulties that might stand in the way of the tree kangaroo’s continued survival?
v. What does the excerpt tell us about Lisa Dabek? Why is she inspired to go on a quest to find and learn more about tree kangaroos? Discuss what the text directly tells us, as well as what we can infer about her motivations.

vi. Though this is a non-fiction, scientific text, the excerpt uses a number of other references. Why? Identify and discuss the subjects or works of literature being referenced (hobbit, troll, Dr. Seuss, dinosaurs, wizards). What do these references help us better understand?

Extension (additional 45 minutes)

f. Propose (SL.5.1, 3-4 and W.5.1-2, 4, 9). Having read this excerpt, ask each student to propose three potential things the team of researchers in the text could do to help the tree kangaroo. Share these proposals together as a class. Which of the proposals are most practical? Which of them are most ideal? At the end of the discussion, put all of the different proposals to a class vote and choose the top three.

g. Photograph (SL.5.4-6). For homework, have your students photograph something—anything—in nature that excites or intrigues them. They should bring their photographs to class to share with the class, along with a paragraph about what they’ve chosen. Encourage them to be creative! It can be an animal, a plant, a type of cloud formation—anything, as long as it’s relevant to the assignment.

4. Think (10 minutes)

a. Respond (W.5.1, 4). Ask students to read the “Think” questions, watch the corresponding video clips, and respond to the questions, either in class or for homework.

5. Write (50 minutes)

a. Discuss (SL.5.1). Read the prompt you have chosen for students, and then solicit questions regarding the prompt or the assignment expectations. Whichever prompt you have chosen, make sure you are clear about the assignment expectations and the rubric by which you and the other students will be evaluating them.

b. Organize (RL.5.1-4 and W.5.1-2, 5). Ask students to go back and annotate the text with the prompt in mind. They should be organizing their thoughts and the points they’ll address in their writing as they make annotations. If you’ve worked on outlining or other organizational tools for writing, this is a good place to apply them.

c. Write (W.5.1-2, 4-6, 8-10). Have students go through the writing process of planning, revising, editing, and publishing their writing responses.

d. Review (W.5.4-6). Use the StudySync “Review” feature to have students complete one to two evaluations of their peers’ work based on your chosen review rubric. Have the students look at and reflect upon the peer evaluations of their own writing. What might you do differently in a revision? How might you strengthen the writing and the ideas?

Extension (additional 100 minutes)

e. Write (W.5.1-2, 4-6, 9-10). For homework, have students write an essay using one of the prompts you did not choose to do in class. Students should publish their responses online.
f. **Write (W.5.1-2, 4, 7).** Ask students to choose a notable conservationist (other than Lisa Dabek) and write one or two paragraphs about their chosen figure. They should describe, if possible, the person’s background, the reasons they are interested in conservationism, and their notable achievements.

g. **Write (W.5.1-2, 4, 7-9).** In conjunction with the earlier extension assignment, ask each student to choose one of the three “action plans” for the tree kangaroos and write a more detailed proposal, explaining exactly how their plans will go into effect. Students should be encouraged to do some research, if necessary, to understand how their ideas could potentially be implemented.
SUPPLEMENTARY MATERIALS

Key Vocabulary

1. literally (adv.) – In a way that uses the actual meaning of what is being described, even though it is surprising
2. cloaked (adj.) – Hidden, concealed
3. hobbit (n.) – A fictional creature from the works of fantasy author J.R.R. Tolkien (The Hobbit, The Lord of the Rings)
4. binoculars (n.) – A device you look through that allows you to see things far away (usually as a pair of binoculars)
5. encounter (n.) – A meeting or experience that is unexpected
6. pert (adj.) – Small and cute
7. concealed (adj.) – Hidden, cloaked
8. intrigued (adj.) – Wanting to know more
9. rare (adj.) – 1. Not usual or common; 2. Special or remarkable
10. remote (adj.) – Distant, far away

Reading Comprehension Questions

Directions: Circle the best possible answer. If you don’t know the meaning of a word, look it up!

1. In the first two paragraphs, the author describes the cloud forest of Papua New Guinea as a ___________ place.
   a. fantastical
   b. scary
   c. confusing
   d. lovely

2. Paragraph 2: “In a place like this, we half expect a hobbit or troll to show up.”
   The underlined terms above are _______________.
   a. dinosaurs
   b. mythical creatures
   c. primates
   d. names of tribes

3. The narrator of this excerpt is _______________.
   a. Lisa Dabek
   b. Nic Bishop
   c. Dr. Seuss
   d. a member of a research team

4. Which of the following statements about Lisa Dabek is true?
   a. She has never seen a tree kangaroo before.
   b. She was born and raised in Seattle, Washington.
   c. She has long been interested in animal behavior.
   d. She has no formal scientific background.
5. Which of the following statements about tree kangaroos is true?
   a. They grow up to be about five or six feet long.
   b. Their eyes and ears are small and cute.
   c. They are extinct.
   d. They are actually descendants of monkeys.

6. When Lisa Dabek first encountered tree kangaroos, she thought that _____________.
   a. they didn’t look real
   b. they weren’t kangaroos
   c. they couldn’t survive in the wild
   d. they lived in an arctic climate

7. In the name “Matschie’s tree kangaroo,” Matschie probably refers to _____________.
   a. the name of the region where the tree kangaroo lives
   b. the owner of the Woodland Park Zoo
   c. the scientist the species is named after
   d. all of the above

8. In this excerpt, the group of scientists and researchers is trying to _____________.
   a. study the tree kangaroo’s habitat and biology
   b. prevent the tree kangaroo from becoming extinct
   c. determine the number of tree kangaroos still living
   d. all of the above

9. The text suggests that ____________ is to blame for the disappearance of tree kangaroos.
   a. deforestation
   b. disease
   c. pollution
   d. domestication

10. We can infer from this excerpt that _____________.
    a. tree kangaroos must be kept in captivity in order to survive
    b. Lisa Dabek is an important figure worldwide in the study of tree kangaroos
    c. this team of researchers is unqualified to study the tree kangaroo
    d. all of the above

Answer Key

1. A
2. B
3. D
4. C
5. B
6. A
7. C
8. D
9. A
10. B
Further Assignments

1. Have students read the entirety of *The Quest for the Tree Kangaroo*, with the accompanying photographs. Continue to foster in-class discussion about the people and the issues in the text, especially how the researchers propose to help the tree kangaroo. Have students compose written responses using the prompts they did not complete before, drawing examples from the whole text. *(RI.5.1-4, 8, 10 and W.5.1-2, 4, 9 and SL.5.1-3)*

2. Having completed *The Quest for the Tree Kangaroo*, have the class read one of Sy Montgomery’s other Scientist in the Field works (e.g. *The Tarantula Scientist* or *The Snake Scientist*). These books can be assigned as class curriculum or as independent reading; either way, be sure students are engaging with topics related to the reading, both in individual, written responses and in group discussion. Have students compare and contrast one of these books to the excerpt (or entirety) of *The Quest for the Tree Kangaroo*. *(RI.5.1-5, 8, 10 and W.5.1-2, 4, 9 and SL.5.1-3)*

3. Students were introduced to Lisa Dabek in the excerpt from *The Quest for the Tree Kangaroo*; for an additional assignment, have the class learn a little bit more about this notable conservationist. Where does she work, what is she known best for, and what has she accomplished to this end? Either individually or in groups, ask students to do a little research about her life’s work. *(RI.5.7 and W.5.7, 9 and SL.5.1)*

4. Assign students to research deforestation and its damaging effects on the environment, both locally and globally. This research should be done in class, with instructor guidance. Require students to find and share at least one important fact about this topic. Then, for homework, have students read up about conservation efforts in Papua New Guinea and compare them, in a written response, to conservation efforts in United States, using the basic research skills they learned in class. What are the two respective countries doing to protect their environments? What more *could* they be doing? *(RI.5.7, 9 and W.5.1-2, 4, 7-9 and SL.5.1, 4)*

5. Screen for the class the National Geographic documentary *Spell of the Tiger*, based on Sy Montgomery’s book of the same title. Ask students to summarize and discuss the documentary, listing at least five important facts they learned and analyzing them in both written responses and in-class discussions. Talk about how this documentary, scripted and narrated by Montgomery, is similar to *The Quest for the Tree Kangaroo* and other books by Montgomery. Together, what do these works tell you about her interests and her life’s work? Why do you think she has chosen these subjects to portray? *(SL.5.1-3 and RI.5.6)*

6. Keep a vocabulary log of every unfamiliar word in the excerpt from *The Quest for the Tree Kangaroo*. On each page of the vocabulary log, “enter” a word, including its dictionary definition, its different word forms, its collocations, its pronunciation (speech stresses, phonemes), and at least one complete sentence using the word. *(ELL)*