



# Ranger Rick's

## Reading Adventures

# Teacher Resource Kit C

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# Meet Ranger Rick and the National Wildlife Federation!

## The Vision

It all started with a Pulitzer Prize-winning cartoonist by the name of Jay “Ding” Darling. Darling was a wildlife enthusiast with a big dream. He envisioned a nationwide federation that would preserve, protect, and promote wildlife. It is not surprising that Darling became close friends with President Theodore Roosevelt, who was known as “the conservation president.”

Yet, it was the other Roosevelt, Theodore’s cousin, Franklin, who would help Darling achieve his dream. In 1936, Darling persuaded the 32nd president to invite 2,000 hunters, anglers, and conservationists from all over the country to Washington, DC, for the first North American Wildlife Conference. It was at this conference that the National Wildlife Federation (NWF) was born.

## The Goal

The National Wildlife Federation strives to unite all Americans to ensure that wildlife thrives in a rapidly changing world. Uniting Americans to preserve the nation’s natural resources is no easy task. Yet, the National Wildlife Federation is up to the challenge! It believes that healthy water, clean air, and public lands are a birthright of all Americans. From the tiniest of insects to the largest of mammals, the National Wildlife Federation wants to ensure the legacy of America’s wildlife for future generations. Tackling water pollution, addressing threats posed by global warming, and restoring habitats are just a few of the trials the National Wildlife Federation is tackling. One of the newest obstacles the National Wildlife Federation faces is technology. With Americans spending the majority of their time “plugged into” electronics, a dire disconnection between people and the natural world has occurred. The National Wildlife Federation is passionately working to inspire people (especially children) to get outdoors and enjoy all that nature has to offer.

## The Kids



In January 1967, a new conservationist came on the scene. Knowledgeable, small, and furry, this little leader was ready to foster a healthy and life-long appreciation of nature in children. His name: Ranger Rick! More than 50 years later, Ranger Rick continues to entertain and educate children about the natural world through various media, including the highly successful magazine series.

## The Partnership

Blue Star Education’s proud partnership with the National Wildlife Federation and Ranger Rick has made possible the creation of a new product that combines reading, writing, and science in an exciting and unique way meant to help enrich students’ knowledge and appreciation of the natural world.



To learn more about the National Wildlife Federation visit: <https://www.nwf.org>

To learn more about Ranger Rick and all his friends visit: <http://www.RangerRick.com>

# What's Included?

This supplemental product utilizes the lovable and lively Ranger Rick characters in conjunction with Ranger Rick educational materials to create a program that combines reading, writing, and science in an exciting and unique way. This kit includes the following resources:

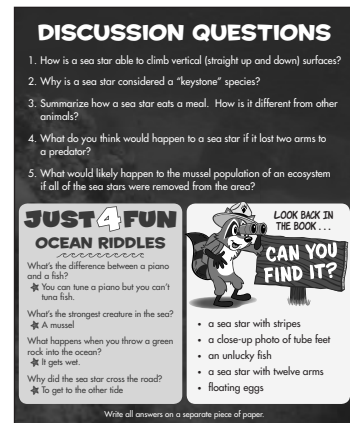
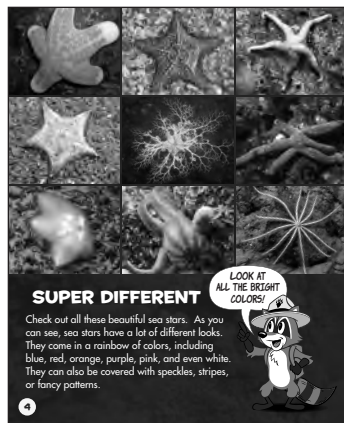
**10 full-color nonfiction readers (6 copies of each reader, for a total of 60 readers!)**



With their stunning real-life photography, colorful diagrams, and grade-appropriate text, these readers will elicit a high level of student interest. Ranger Rick appears throughout the series and will delight young readers with his witty and humorous comments and informative, fun facts. Each reader includes a glossary, discussion questions, and fun activities to increase student engagement and learning.

Pages are packed with beautiful nature photography!

Discussion questions and fun activities promote close reading.



Each reader contains a glossary that has both photos and age-appropriate definitions of key vocabulary from the text.

# What's Included? (cont.)

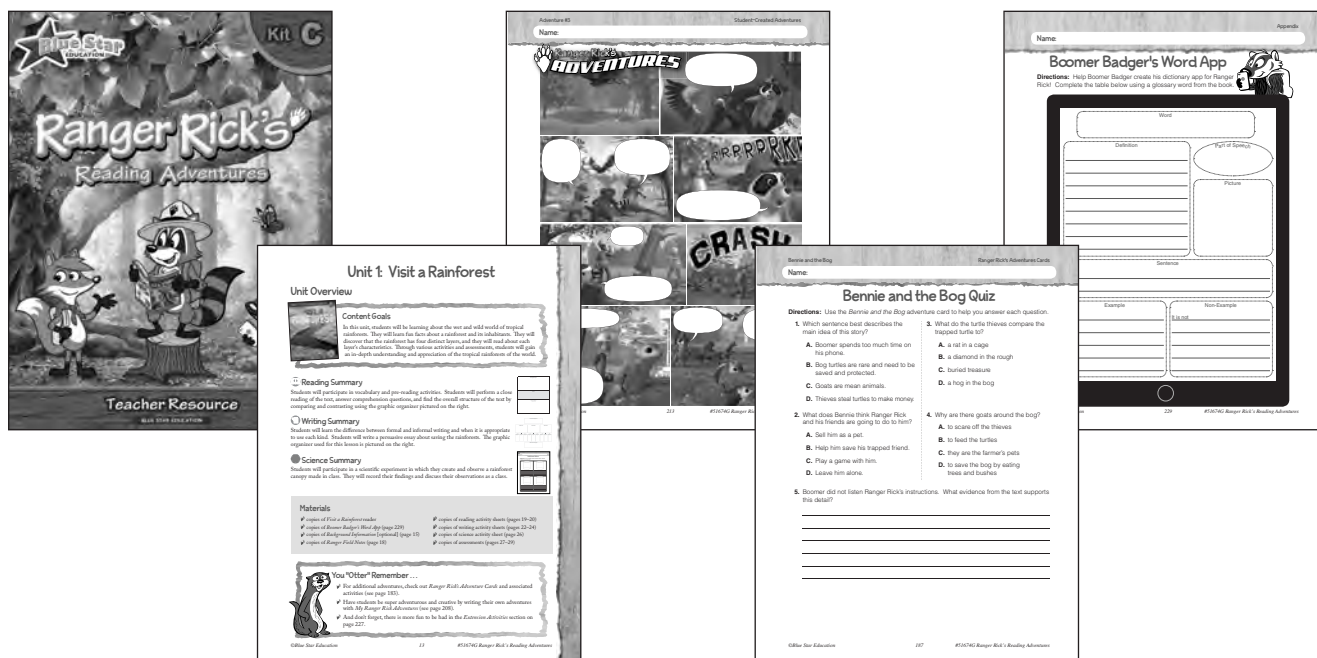
## 6 full-color *Ranger Rick's Adventure Cards* (6 copies of 6 titles, for a total of 36 cards!)

These four-page, folder-style reading cards take students on comic book-style adventures with Ranger Rick and his pals Scarlett Fox and Boomer Badger.



## 240-page Teacher's Guide & CD

This teacher's guide consists of 10 units—one unit for each of the nonfiction readers. The units are broken down into three sections: a reading lesson, a writing lesson, and a science lesson. Following the units are literature-based lessons to accompany the *Ranger Rick's Adventure Cards*. Also included are the student-created *My Ranger Rick Adventures* templates, fun extension activities, and a comprehensive answer key. The CD contains printable PDF files of the reproducible student activity pages, the background information pages, and the assessments. Standards correlations are also included on the CD.



## Labeled Reader Storage Bins

Included in each *Ranger Rick Reading Adventures* kit are five rigid storage bins for organizing and protecting your Ranger Rick readers. Numbered storage bin labels are included with each kit and may be adhered to the top-rear of each reading bin.

# Unit Breakdown

Each of the 10 units contains engaging lessons and activities that will increase students' knowledge of and appreciation for the natural world. They will motivate students to "unplug" and get outdoors to explore their natural surroundings and learn more about Earth's vast wildlife.


**Content goals** inform the teacher about the subject matter in which the students will be engaging. Whether it is *creepy-crawly* scorpions or *super silly* fish eyes, these high-interest topics will grab students' attention and inspire them to read.

The **summary** section shows and explains to the teacher the activities students will be completing in each section of the unit.

The **materials** section offers a list of the reproducible student pages teachers will need to complete each unit. *Note: The science lessons contain an additional materials list that includes items needed to conduct scientific experiments.*

## Unit 1: Visit a Rainforest

### Unit Overview




**Content Goals**

In this unit, students will be learning about the wet and wild world of tropical rainforests. They will learn fun facts about a rainforest and its inhabitants. They will discover that the rainforest has four distinct layers, and they will read about each layer's characteristics. Through various activities and assessments, students will gain an in-depth understanding and appreciation of the tropical rainforests of the world.


**Reading Summary**

Students will participate in vocabulary and pre-reading activities. Students will perform a close reading of the text, answer comprehension questions, and find the overall structure of the text by comparing and contrasting using the graphic organizer pictured on the right.




**Writing Summary**

Students will learn the difference between formal and informal writing and when it is appropriate to use each kind. Students will write a persuasive essay about saving the rainforests. The graphic organizer used for this lesson is pictured on the right.



**Science Summary**


Students will participate in a scientific experiment in which they create and observe a rainforest canopy made in class. They will record their findings and discuss their observations as a class.



**Materials**

✎ copies of <i>Visit a Rainforest</i> reader	✎ copies of reading activity sheets (pages 19–20)
✎ copies of <i>Boomer Badger's World App</i> (page 229)	✎ copies of writing activity sheets (pages 22–24)
✎ copies of <i>Background Information</i> [optional] (page 15)	✎ copies of science activity sheet (page 26)
✎ copies of <i>Ranger Field Notes</i> (page 18)	✎ copies of assessments (pages 27–29)

**You "Otter" Remember ...**



- ✎ For additional adventures, check out *Ranger Rick's Adventure Cards* and associated activities (see page 183).
- ✎ Have students be super adventurous and creative by writing their own adventures with *My Ranger Rick Adventures* (see page 208).
- ✎ And don't forget, there is more fun to be had in the *Extension Activities* section on page 227.

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Reggie Otter is here to remind teachers of the **additional materials** that can be used with each unit of study, including the adventure cards, adventure card templates for student-created narratives, and extension activities.

# Unit Breakdown *(cont.)*

Vocabulary development is reinforced most when it is part of a unit of work in which students are likely to interact with the new words a number of times. These units introduce a wide variety of new content vocabulary words that are repeated throughout the reading, writing, and science lessons. This helps students develop their vocabulary as they integrate these new words into their speaking, writing, and ideas. Frontloading vocabulary terms has proven to be a successful instructional strategy for increasing student comprehension of texts.

This table contains all the **vocabulary words** from the glossary of each reader. It includes definitions and a sample sentence for each of the words. Review the table with students prior to beginning the reading lesson.

This section lists various ways to utilize the *Boomer Badger's Word App* **vocabulary graphic organizer** in order to help build student comprehension of a new vocabulary word.

This section contains three different **vocabulary activities** students can engage in to increase depth and understanding of the content vocabulary for this unit.

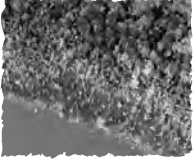
Unit 1 Visit a Rainforest	
Key Vocabulary	
Procedure	
Step 1: Review the following vocabulary words and definitions with the class. Read each sample sentence aloud.	
Vocabulary Word	Definition
atmosphere	the mass of air that surrounds the earth. <i>Sample Sentence:</i> Earth's atmosphere is a mixture of gases, one of which is oxygen.
decay	to be slowly destroyed by natural processes; to decompose. <i>Sample Sentence:</i> I forgot to water my houseplant, and it <i>decayed</i> quickly.
equator	an imaginary circle around the middle of Earth that is the same distance from the North Pole and the South Pole. <i>Sample Sentence:</i> The weather is humid near Earth's <i>equator</i> .
fungus	a group of living organisms (such as mushrooms and mold) that live on dead or decaying things. <i>Sample Sentence:</i> Some type of <i>fungus</i> is growing on the leaves on that tree.
shimmering	shining with or reflecting a light that appears to move slightly. <i>Sample Sentence:</i> The rainforest created giant puddles that <i>shimmered</i> in the sunlight.
snorkel	a special tube that makes it possible to breathe while underwater. <i>Sample Sentence:</i> I'm going to bring my <i>snorkel</i> to the beach so that I can observe the fish underwater.
Step 2: Distribute copies of the <i>Boomer Badger's Word App</i> activity sheet (page 229) to students. This sheet can be utilized in different ways.	
<ul style="list-style-type: none"> <li>You may divide the class into six groups and assign each group one word. Have groups share their completed activity sheets with the class.</li> <li>Place students in groups of six and assign each student one word. Have students share their completed sheets with their groups.</li> <li>You may wish for students to work independently. In this case, have each student choose a word from the glossary that he or she considers to be the most challenging. Ask student volunteers to share their completed activity sheets with the class.</li> </ul>	
Step 3: If time permits, try some of the fun vocabulary activities listed below.	
<ul style="list-style-type: none"> <li>Have students write a fictional short story that is set in a rainforest. Challenge them to use as many vocabulary words as they can.</li> <li>Have students create an infographic about one of the layers in a rainforest. Challenge them to include at least three of the vocabulary words.</li> <li>Place students in pairs and have them take turns quizzing each other on the vocabulary words.</li> </ul>	
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Unit 1 Visit a Rainforest

**Teacher Note:** Read the following background information aloud to students. This will help increase students' prior knowledge of the topic, leading to a better understanding of the *Visit a Rainforest* text. If you wish for students to follow along, simply cut along the line below and make copies of the text.

### Remarkable Rainforests

If you have a houseplant, you have to remember to water it. But did you know that tropical rainforests water themselves? How remarkable is that? These seemingly magical forests have high amounts of rainfall. They are so warm and moist that they make their own rain through the process of evaporation. Some of Earth's rainforests have been around for more than 70 million years! They are packed full of life. A wide variety of plant, tree, and animal species call these rainforests home. Rainforests exist on every continent except Antarctica. There are two types of rainforests: tropical and temperate.




Tropical rainforests are located in the tropics. This means they are between the Tropic of Cancer and the Tropic of Capricorn. These rainforests are warm and wet. Some of our planet's largest tropical rainforests are in South America and Africa. These rainforests are made up of four layers. Each of these layers is unique. They differ in the amount of sunlight they get. They also differ in the types of organisms that inhabit them. Millions of species live in tropical rainforests—everything from plants and bacteria to human beings and animals. In tropical rainforests, you will see animals such as anacondas, sloths, and toucans, just to name a few.

The majority of temperate rainforests are found along the coasts of places like North America and South America. Oregon and Alaska in the United States have temperate rainforests, as does Chile. These forests are not warm like the tropical rainforests; they are much cooler. They also receive less rain and sun. These forests are packed with ferns, mosses, and incredibly tall trees. And these large trees are not young. They are old—very old. Some of the biggest and oldest trees in the world are located in temperate rainforests. In these forests you will find birds, insects, reptiles, and mammals. Bears, bobcats, and mountain lions are common in these regions as well.

Sadly, many of the world's rainforests are in grave danger. They are disappearing quickly. Humans have been cutting down rainforests for centuries. This is called deforestation. The areas are cleared to build developments or for farming. Rainforests are also cut down so that the trees can be sold as wood or used to make paper. This is called logging. The construction of roads, mines, and dams have also hurt the rainforests. There are many people trying to help save the rainforests. They are known as conservationists. They understand the importance of the rainforests and its many species. It is important that we continue to save and study the rainforests. We still have so much to learn about these diverse ecosystems.

**READ VISIT A RAINFOREST TO LEARN MORE ABOUT THE FUNGUS AND MUSHROOMS THAT THRIVE IN TROPICAL RAINFORESTS!**



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Frontloading information is an effective way to increase student comprehension. As such, each unit includes a **background information** page. This page contains an overview of the topic, including additional information not found in the reader. The text is grade appropriate and engaging.

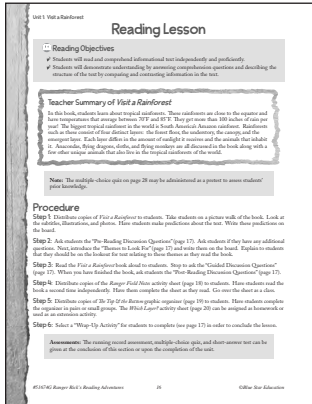
The teacher may choose to read the information aloud while students follow along. Or, the teacher may wish for students to read the information independently or in small groups first, coding the text as they read. Students can use *question marks* to identify questions they have about the text, *exclamation points* to mark topics they want to learn more about, or *stars* to identify their favorite parts. These points can then be discussed with the class.

These units take learning to a higher, cross-curricular level by connecting reading, writing, and science to meet national and statewide standards of learning. Let's take a closer look at the lesson structure within each unit.

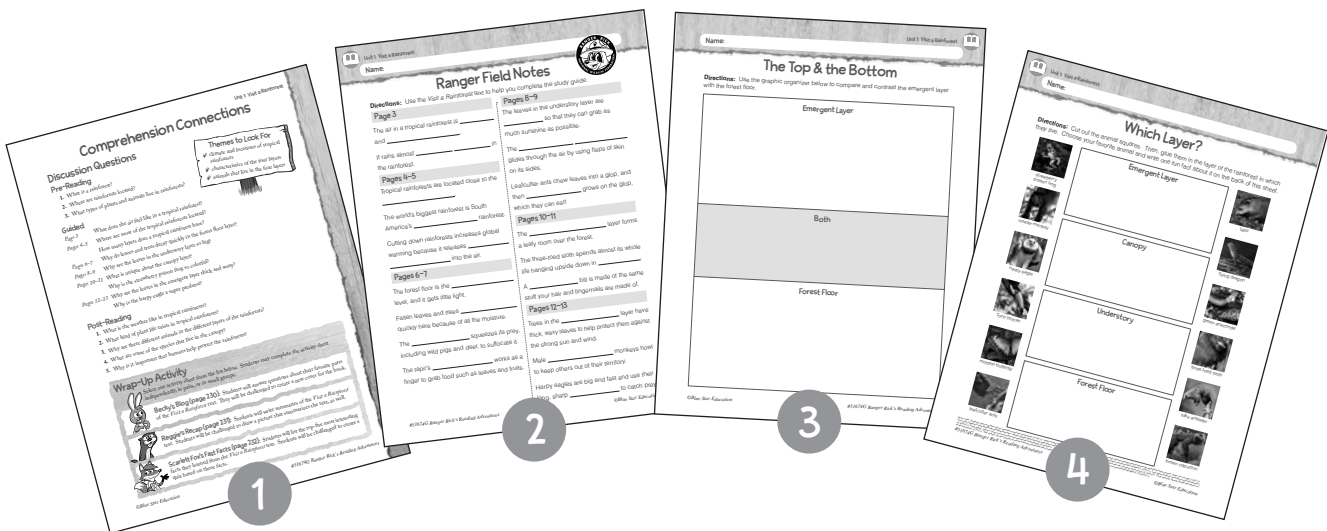
# Unit Breakdown *(cont.)*

## A Closer Look: The Reading Lessons

Within each unit, you will find a reading comprehension lesson. These lessons are designed for whole-class instruction but can also be used for small groups. Below is a page-by-page description of the lesson structure.



Reading objectives and a summary of the content reader are provided at the top of the first page. Clear and concise step-by-step instructions are designed to guide the teacher seamlessly through the lesson. Each lesson includes pre-reading, during-reading, and post-reading activities.



**1** The *Comprehension Connections* page includes pre-reading discussion questions to spark student interest and to help measure students' prior knowledge. Also included are themes to look for. Write these on the board, and discuss them with students before they begin reading. This will help focus students' attention and encourage critical thinking. To help further guide discussion and understanding, there are questions for each page of the reader. As the teacher reads the book aloud, he or she should pause and ask the class these questions. The post-reading discussion questions can be completed after the first whole-class read or following the second independent read.

**2** The *Ranger Field Notes* page helps students record the most important information presented on each page of the reader. Students will fill in the missing information as they read. They can save this sheet and use it as a reference tool for later activities or as a study guide for the assessments.

**3** The *Graphic Organizer* sheet helps students visualize information and organize their thoughts. Graphic organizers allow students to think more clearly and to more easily access and understand information presented in the text.

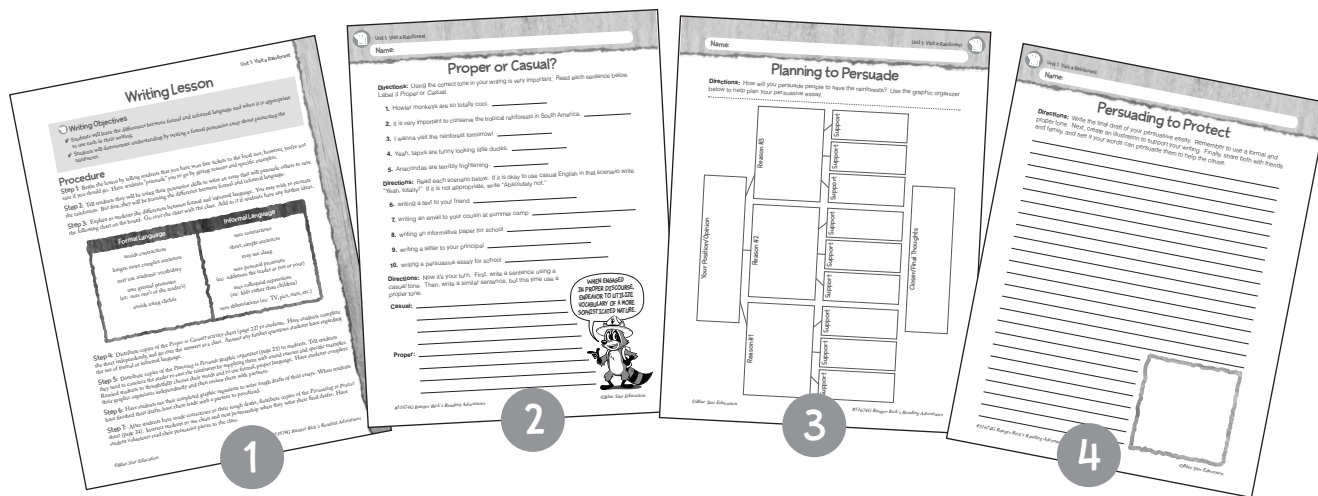
**4** An informative (and often amusing) *activity sheet* concludes the reading lesson. These differ in content and form from unit to unit and can be assigned as an assessment, extension activity, or homework.



# Unit Breakdown *(cont.)*

## A Closer Look: The Writing Lessons

Following each reading lesson is a writing lesson. These four-page lessons are designed to improve students' writing skills and knowledge of the English language. Below is a page-by-page description of the lesson structure.



- 1 The *Lesson Plan* page includes the writing objectives along with clear and concise step-by-step instructions to guide the teacher seamlessly through the lesson.
- 2 Understanding the English language and all its nuances is a must to improve and elevate a student's writing. In each writing lesson, students learn or review a language skill that they will then use in their writing assignment for that unit. The *Language Activity Sheet* helps to assess student understanding of the language skill or application being taught.
- 3 The *Graphic Organizer* sheet helps students to visualize and organize the information and ideas they will use in their writing.
- 4 The *Final Draft* page is a fun way for students to record and show off their writing skills. These sheets can be collected at the end of the year and assembled into a book for students to take home and share with their families.

The following briefly describes the writing and language skills studied for each unit.

Unit	Writing Skill	Language Skill
<i>Visit a Rainforest</i>	persuasive essay	formal and informal language
<i>It's Raining!</i>	problem-and-solution tale	correct order of adjectives
<i>What's So Super About Sea Stars?</i>	fairytale	proverbs
<i>Fish Eyes</i>	informative report	using quotation marks and commas
<i>Scorpions</i>	friendly letter	relative pronouns
<i>Cool Creatures</i>	compare-and-contrast essay	synonyms and antonyms
<i>Woodpeckers</i>	procedural text	misspelled words, capitalization, and proper punctuation
<i>The Ocean</i>	opinion writing in a blog	parentheses, dashes, and exclamation points
<i>Stranger Than Fiction!</i>	personal narrative	sentence fragments
<i>Awesome Orcas</i>	poetry	figurative language

# Unit Breakdown *(cont.)*



## A Closer Look: The Science Lessons

These two-page hands-on science lessons are intended to be used in conjunction with the readers included in this kit. They highlight and further supplement the science content for the varied wildlife topics featured in this program. Below is a page-by-page description of the lesson structure.

Unit 1: Visit a Rainforest

### Science Lesson

**Science Objectives**

- Students will learn about cycles of matter and energy transfer in a rainforest ecosystem.
- Students will demonstrate understanding by performing an experiment in which they create a mini rainforest in a jar.

**Background**  
Rainforests get more than 100 inches of rain each year. Much of that rain is created by the rainforests themselves. Yes, it can water itself! This happens through the process of transpiration. Due to the consistent warm weather in the tropics, the trees in the canopy layer release water into the air to stay cool. This moisture rises and forms clouds over the rainforest. These clouds will soon get too heavy and release the water, thereby producing rain.

**Materials**

- clean glass jars (such as mayonnaise jars or pickle jars)
- small plants (such as moss, ferns, or grass)
- potting soil
- water
- gravel
- plastic wrap
- rubber bands

**Procedure**

**Step 1:** Begin the lesson by reading the first column of "Forest Facts" on page 4 of the *Visit a Rainforest* book. Tell students that much of the rain that falls on a rainforest is created by the rainforest itself. Ask them to write a hypothesis in which they explain how they think this works. Write some of the student hypotheses on the board.

**Step 2:** Explain to students that they will be creating their own mini rainforests to help them understand how a rainforest creates its own rain. Place students in **small groups**. Instruct groups on how to create their own mini rainforest. Follow the steps below.

- 1: Place a layer of gravel in the bottom of the clean glass jar.
- 2: Add a layer (about two inches thick) of soil on top of the gravel.
- 3: Place the plants in the soil. Be sure the roots are covered.
- 4: Add water to dampen the soil.
- 5: Cover the top of the jar with plastic wrap. Place a rubber band around the plastic.

**Step 3:** Have groups label their jars with the name of their mini rainforest and place the jars in direct sunlight. The next day, distribute copies of the *Rainforest Watch* activity sheet (page 26) to students. Have them draw what they see in the jar over the next four days. Be sure students label their drawings. Have them record detailed written observations, as well.

**Step 4:** At the end of the four days, hold a class discussion about the experiment and go over student observations. Be sure to discuss the process of transpiration and evaporation.

**Scarlett's STEM Challenge!**

It is important for scientists to study the plant and animal life in the canopy layer. Challenge students to build a model of a platform with a pulley system that would help scientists study the high and humid canopy layer.

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The **science objectives** explain what content will be covered and what scientific experiment will be conducted in order to demonstrate student understanding.

The **background information** sets the scene for the science experiment students will be conducting. Each experiment ties into the content of the unit's reader.

The **materials** list is a comprehensive list of the items needed for students to complete the scientific experiment used in the lesson.

Clear and concise **step-by-step instructions** guide the teacher seamlessly through the lesson in which students conduct an experiment, record their findings, and discuss their observations as a class.

Each lesson concludes with one of Scarlett Fox's **STEM Challenge** ideas. These challenges are meant to enhance student learning by incorporating science, technology, engineering, and mathematics. They are simple ideas that will get students' critical-thinking skills going and inspire them to put their abilities to the test.

Each lesson includes a **student activity sheet**. These vary from lesson to lesson. Some offer places to record student observations as they conduct their experiments, while others include reflection questions to further student understanding and help them interpret their recorded data.

Unit 1: Visit a Rainforest

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

### Rainforest Watch

**Directions:** Observe your mini rainforest carefully over the next four days. Record your findings below. Be sure your drawings are detailed and labeled. Make sure your written observations are clear and thorough.

<p>Day 1</p> _____ _____ _____	<p>Day 2</p> _____ _____ _____
<p>Day 3</p> _____ _____ _____	<p>Day 4</p> _____ _____ _____

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# Unit Breakdown *(cont.)*

## Assessments

Each of the 10 units comes with various forms of assessments. In addition to the activity sheets, there is a running record sheet, a multiple-choice quiz, and a short-answer assessment.

The Running Record sheet is a form for tracking student reading performance. It includes a header for 'Unit 1: Lost a Badger' with fields for Name, Date, and Score. The main body is divided into 'Text' and 'Comprehension Questions' sections. The 'Text' section contains a passage about a badger and a student's reading progress, with the 100th word underlined and in boldface. The 'Comprehension Questions' section contains six numbered questions related to the text.

The **running record** sheet allows the teacher to note errors and the self-correction process as the student reads the first 100+ words of the text. The 100th word is underlined and in boldface. When a student has completed the reading passage, record his or her responses to the comprehension questions. Lastly, analyze the data, evaluate reading behaviors, and make recommendations for further progress.

This six-question **multiple-choice quiz** provides teachers the opportunity to evaluate student understanding. It can be used as a pre-test to assess students' prior knowledge and as a post-test to formally assess student comprehension of the information presented in the reader.

The Multiple-Choice Quiz is a form with a header for 'Unit 1: Lost a Badger' and fields for Name and Date. It contains six multiple-choice questions related to the text. The questions are: 1. What is the main idea of the passage? 2. What is the author's purpose? 3. What is the author's tone? 4. Which is NOT a detail from the passage? 5. Which is NOT a detail from the passage? 6. Which is NOT a detail from the passage?

The Short-Answer Test is a form with a header for 'Unit 1: Lost a Badger' and fields for Name and Date. It contains four short-answer questions related to the text. The questions are: 1. Why does the author write this story? 2. What is the author's purpose? 3. Why does the author write this story? 4. What does the author's tone tell you about the story?

This four-question **short-answer test** is meant to be an open-book exam in which students find evidence from the text to answer the questions. Referring to details and examples in a text when answering a question is a critical skill students should master.

## Extension Activities and Appendix

This collection of activities found on pages 227–232 can be used with any of the readers. The activities provide fun and engaging additional opportunities for learning and serve as a way to further students' reading-comprehension skills.

The Boomer Badger's Word App is a form with a header for 'Unit 1: Lost a Badger' and fields for Name and Date. It contains a word app activity with a grid of words and a list of words to be used in a story. The Becky's Blog is a form with a header for 'Unit 1: Lost a Badger' and fields for Name and Date. It contains a blog writing activity with a grid of words and a list of words to be used in a story.

## Ranger Rick's Adventure Cards



These comic book-style cards will be an instant hit with students. Each card comes with a complete literature-based lesson plan that includes a student activity sheet and quiz. For more information about these cards and

lessons, please see page 183.

## My Ranger Rick Adventures



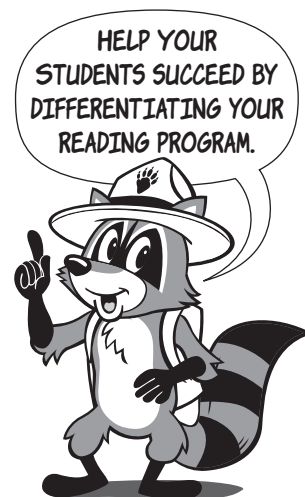
These blank versions of the Ranger Rick's Adventure Cards allow students' creative energy to flow freely. With these cards, students will be challenged to create their own narrative and text using the information and skills they have learned throughout the course of the program. For more information about My Ranger

Rick Adventures, please see page 208.

# Reader Levels

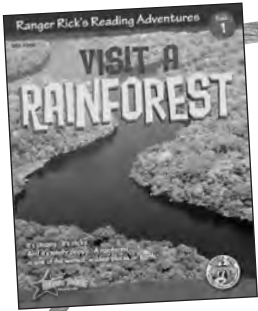
The following chart includes information about the readers in *Ranger Rick's Reading Adventures: Kit C*. The chart is a general guide to a variety of leveling systems and how they correlate with the readers and with each other. Keep in mind that this is a reference tool for the leveled texts, and that the information reflects ideal expectations—not necessarily the students' actual reading levels.

Book #	Book Title	Developmental Stage	Reading Level	Lexile® Level	Word Count
1	<i>Visit a Rainforest</i>	Fluent	P, Q	840	1240
2	<i>It's Raining!</i>	Fluent	P, Q	860	1060
3	<i>What's So Super About Sea Stars?</i>	Fluent	Q, R	880	915
4	<i>Fish Eyes</i>	Fluent	Q, R	890	1004
5	<i>Scorpions</i>	Fluent	R	910	1104
6	<i>Cool Creatures</i>	Fluent	R, S	920	1043
7	<i>Woodpeckers</i>	Fluent	R, S	950	895
8	<i>The Ocean</i>	Fluent	S, T	970	1674
9	<i>Stranger Than Fiction!</i>	Fluent	T	990	918
10	<i>Awesome Orcas</i>	Fluent	T	1000	885



# Unit 1: Visit a Rainforest

## Unit Overview

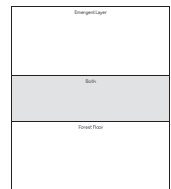


### Content Goals

In this unit, students will be learning about the wet and wild world of tropical rainforests. They will learn fun facts about a rainforest and its inhabitants. They will discover that the rainforest has four distinct layers, and they will read about each layer's characteristics. Through various activities and assessments, students will gain an in-depth understanding and appreciation of the tropical rainforests of the world.

### Reading Summary

Students will participate in vocabulary and pre-reading activities. Students will perform a close reading of the text, answer comprehension questions, and find the overall structure of the text by comparing and contrasting using the graphic organizer pictured on the right.



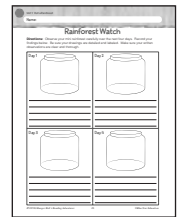
### Writing Summary

Students will learn the difference between formal and informal writing and when it is appropriate to use each kind. Students will write a persuasive essay about saving the rainforests. The graphic organizer used for this lesson is pictured on the right.



### Science Summary

Students will participate in a scientific experiment in which they create and observe a rainforest canopy made in class. They will record their findings and discuss their observations as a class.



## Materials

- 🐾 copies of *Visit a Rainforest* reader
- 🐾 copies of *Boomer Badger's Word App* (page 229)
- 🐾 copies of *Background Information* [optional] (page 15)
- 🐾 copies of *Ranger Field Notes* (page 18)
- 🐾 copies of reading activity sheets (pages 19–20)
- 🐾 copies of writing activity sheets (pages 22–24)
- 🐾 copies of science activity sheet (page 26)
- 🐾 copies of assessments (pages 27–29)



### You "Otter" Remember ...

- 🐾 For additional adventures, check out *Ranger Rick's Adventure Cards* and associated activities (see page 183).
- 🐾 Have students be super adventurous and creative by writing their own adventures with *My Ranger Rick Adventures* (see page 208).
- 🐾 And don't forget, there is more fun to be had in the *Extension Activities* section on page 227.

# Key Vocabulary

## Procedure

**Step 1:** Review the following vocabulary words and definitions with the class. Read each sample sentence aloud.

Vocabulary Word	Definition
atmosphere	the mass of air that surrounds the earth <i>Sample Sentence:</i> Earth's <i>atmosphere</i> is a mixture of gases, one of which is oxygen.
decay	to be slowly destroyed by natural processes; to decompose <i>Sample Sentence:</i> I forgot to water my houseplant, and it <i>decayed</i> quickly.
equator	an imaginary circle around the middle of Earth that is the same distance from the North Pole and the South Pole <i>Sample Sentence:</i> The weather is humid near Earth's <i>equator</i> .
fungus	a group of living organisms (such as mushrooms and mold) that live on dead or decaying things <i>Sample Sentence:</i> Some type of <i>fungus</i> is growing on the leaves on that tree.
shimmering	shining with or reflecting a light that appears to move slightly <i>Sample Sentence:</i> The rainstorm created giant puddles that <i>shimmered</i> in the sunlight.
snorkel	a special tube that makes it possible to breathe while underwater <i>Sample Sentence:</i> I'm going to bring my <i>snorkel</i> to the beach so that I can observe the fish underwater.

**Step 2:** Distribute copies of the *Boomer Badger's Word App* activity sheet (page 229) to students. This sheet can be utilized in different ways.

- 🐾 You may divide the class into six groups and assign each group one word. Have groups share their completed activity sheets with the class.
- 🐾 Place students in groups of six and assign each student one word. Have students share their completed sheets with their groups.
- 🐾 You may wish for students to work independently. In this case, have each student choose a word from the glossary that he or she considers to be the most challenging. Ask student volunteers to share their completed activity sheets with the class.

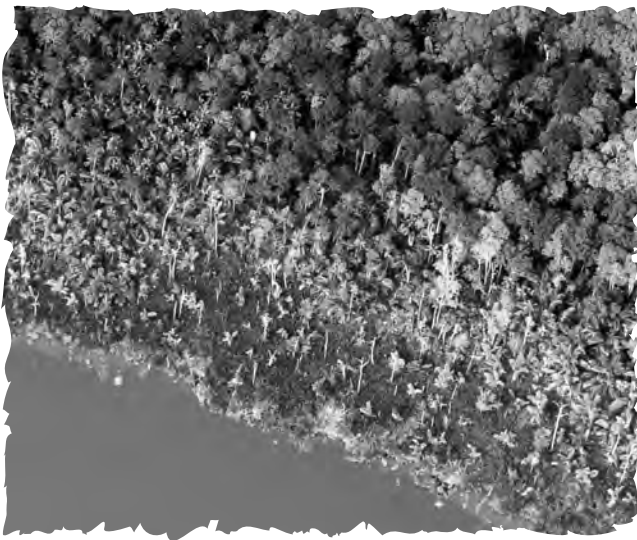
**Step 3:** If time permits, try some of the fun vocabulary activities listed below.

- 🐾 Have students write a fictional short story that is set in a rainforest. Challenge them to use as many vocabulary words as they can.
- 🐾 Have students create an infographic about one of the layers in a rainforest. Challenge them to include at least three of the vocabulary words.
- 🐾 Place students in pairs and have them take turns quizzing each other on the vocabulary words.

**Teacher Notes:** Read the following background information aloud to students. This will help increase students' prior knowledge of the topic, leading to a better understanding of the *Visit a Rainforest* text. If you wish for students to follow along, simply cut along the line below and make copies of the text.

## Remarkable Rainforests

If you have a houseplant, you have to remember to water it. But did you know that tropical rainforests water themselves? How remarkable is that? These seemingly magical forests have high amounts of rainfall. They are so warm and moist that they make their own rain through the process of evaporation. Some of Earth's rainforests have been around for more than 70 million years! They are packed full of life. A wide variety of plant, tree, and animal species call these rainforests home. Rainforests exist on every continent except Antarctica. There are two types of rainforests: *tropical and temperate*.



Tropical rainforests are located in the tropics. This means they are between the Tropic of Cancer and the Tropic of Capricorn. These rainforests are warm and wet. Some of our planet's largest tropical rainforests are in South America and Africa. These rainforests are made up of four layers. Each of these layers is unique. They differ in the amount of sunlight they get. They also differ in the types of organisms that inhabit them. Millions of species live in tropical rainforests—everything from plants and bacteria to human beings and animals. In tropical rainforests, you will see animals such as anacondas, sloths, and toucans, just to name a few.

The majority of temperate rainforests are found along the coasts of places like North America and South America. Oregon and Alaska in the United States have temperate rainforests, as does Chile. These forests are not warm like the tropical rainforests; they are much cooler. They also receive less rain and sun. These forests are packed with ferns, mosses, and incredibly tall trees. And these large trees are not young. They are old—very old. Some of the biggest and oldest trees in the world are located in temperate rainforests. In these forests you will find birds, insects, reptiles, and mammals. Bears, bobcats, and mountain lions are common in these regions as well.

Sadly, many of the world's rainforests are in grave danger. They are disappearing quickly. Humans have been cutting down rainforests for centuries. This is called *deforestation*. The areas are cleared to build developments or for farming. Rainforests are also cut down so that the trees can be sold as wood or used to make paper. This is called *logging*. The construction of roads, mines, and dams have also hurt the rainforests. There are many people trying to help save the rainforests. They are known as *conservationists*. They understand the importance of the rainforests and its many species. It is important that we continue to save and study the rainforests. We still have so much to learn about these diverse ecosystems.



READ VISIT A  
RAINFOREST TO LEARN MORE ABOUT  
THE PLANTS AND ANIMALS THAT INHABIT  
TROPICAL RAINFORESTS!



Photo credit: Rainforest, Bernal Saborio (www.flickr.com/photos/44073224@N04/), CC BY-SA 2.0.

# Reading Lesson

## Reading Objectives

-  Students will read and comprehend informational text independently and proficiently.
-  Students will demonstrate understanding by answering comprehension questions and describing the structure of the text by comparing and contrasting information in the text.

## Teacher Summary of *Visit a Rainforest*

In this book, students learn about tropical rainforests. These rainforests are close to the equator and have temperatures that average between 70°F and 85°F. They get more than 100 inches of rain per year! The biggest tropical rainforest in the world is South America's Amazon rainforest. Rainforests such as these consist of four distinct layers: the forest floor, the understory, the canopy, and the emergent layer. Each layer differs in the amount of sunlight it receives and the animals that inhabit it. Anacondas, flying dragons, sloths, and flying monkeys are all discussed in the book along with a few other unique animals that also live in the tropical rainforests of the world.

**Note:** The multiple-choice quiz on page 28 may be administered as a pretest to assess students' prior knowledge.

## Procedure

**Step 1:** Distribute copies of *Visit a Rainforest* to students. Take students on a picture walk of the book. Look at the subtitles, illustrations, and photos. Have students make predictions about the text. Write these predictions on the board.

**Step 2:** Ask students the “Pre-Reading Discussion Questions” (page 17). Ask students if they have any additional questions. Next, introduce the “Themes to Look For” (page 17) and write them on the board. Explain to students that they should be on the lookout for text relating to these themes as they read the book.

**Step 3:** Read the *Visit a Rainforest* book aloud to students. Stop to ask the “Guided Discussion Questions” (page 17). When you have finished the book, ask students the “Post-Reading Discussion Questions” (page 17).

**Step 4:** Distribute copies of the *Ranger Field Notes* activity sheet (page 18) to students. Have students read the book a second time independently. Have them complete the sheet as they read. Go over the sheet as a class.

**Step 5:** Distribute copies of *The Top & the Bottom* graphic organizer (page 19) to students. Have students complete the organizer in pairs or small groups. The *Which Layer?* activity sheet (page 20) can be assigned as homework or used as an extension activity.

**Step 6:** Select a “Wrap-Up Activity” for students to complete (see page 17) in order to conclude the lesson.

**Assessments:** The running-record assessment, multiple-choice quiz, and short-answer test can be given at the conclusion of this section or upon the completion of the unit.

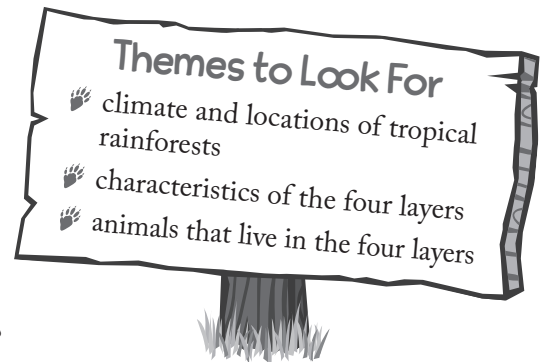


# Comprehension Connections

## Discussion Questions

### Pre-Reading

1. What is a rainforest?
2. Where are rainforests located?
3. What types of plants and animals live in rainforests?



### Guided

*Page 3* What does the air feel like in a tropical rainforest?

*Pages 4–5* Where are most of the tropical rainforests located?  
How many layers does a tropical rainforest have?

*Pages 6–7* Why do leaves and trees decay quickly in the forest floor layer?

*Pages 8–9* Why are the leaves in the understory layer so big?

*Pages 10–11* What is unique about the canopy layer?

Why do strawberry poison frogs climb up into the rainforest canopy?

*Pages 12–13* Why are the leaves in the emergent layer thick and waxy?

Why is the harpy eagle a super predator?

### Post-Reading

1. What is the weather like in tropical rainforests?
2. What kind of plant life exists in tropical rainforests?
3. Why are there different animals in the different layers of the rainforests?
4. What are some of the species that live in the canopy?
5. Why is it important that humans help protect the rainforests?

## Wrap-Up Activity



Select one activity sheet from the list below. Students may complete the activity sheet independently, in pairs, or in small groups.

**Becky's Blog (page 230):** Students will answer questions about their favorite parts of the *Visit a Rainforest* text. They will be challenged to create a new cover for the book.



**Reggie's Recap (page 231):** Students will write summaries of the *Visit a Rainforest* text. Students will be challenged to draw a picture that summarizes the text, as well.



**Scarlett Fox's Fast Facts (page 232):** Students will list the top-five most interesting facts they learned from the *Visit a Rainforest* text. Students will be challenged to create a quiz based on those facts.



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



# Ranger Field Notes

**Directions:** Use the *Visit a Rainforest* text to help you complete the study guide.

## Page 3

The air in a tropical rainforest is \_\_\_\_\_  
and \_\_\_\_\_.

It rains almost \_\_\_\_\_ in  
the rainforest.

## Pages 4–5

Tropical rainforests are located close to the  
\_\_\_\_\_.

The world's biggest rainforest is South  
America's \_\_\_\_\_ rainforest.

Cutting down rainforests increases global  
warming because it releases \_\_\_\_\_  
\_\_\_\_\_ into the air.

## Pages 6–7

The forest floor is the \_\_\_\_\_  
level, and it gets little light.

Fallen leaves and trees \_\_\_\_\_  
quickly here because of all the moisture.

The \_\_\_\_\_ squeezes its prey,  
including wild pigs and deer, to death.

The tapir's \_\_\_\_\_ works as a  
finger to grab food such as leaves and fruits.

## Pages 8–9

The leaves in the understory layer are  
\_\_\_\_\_ so that they can grab as  
much sunshine as possible.

Leafcutter ants chew leaves into a glop, and  
then \_\_\_\_\_ grows on the glop,  
which they can eat!

The \_\_\_\_\_  
glides through the air by using flaps of skin  
on its sides.

## Pages 10–11

The \_\_\_\_\_ layer forms  
a leafy roof over the forest.

The three-toed sloth spends almost its whole  
life hanging upside down in \_\_\_\_\_.

A \_\_\_\_\_ bill is made of the same  
stuff your hair and fingernails are made of.

## Pages 12–13

Trees in the \_\_\_\_\_ layer have  
thick, waxy leaves to help protect them against  
the strong sun and wind.

Male \_\_\_\_\_ monkeys howl  
to keep others out of their territory.

Harpy eagles are big and fast and use their  
long, sharp \_\_\_\_\_ to catch prey.



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

# The Top & the Bottom

**Directions:** Use the graphic organizer below to compare and contrast the emergent layer with the forest floor.

Emergent Layer
Both
Forest Floor



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

# Which Layer?

**Directions:** Cut out the animal squares. Glue them in the layer of the rainforest in which they live. Then, choose your favorite animal and write one fun fact about it on the back of this sheet.



strawberry  
poison frog



howler monkey



harpy eagle



Toco toucan



morpho butterfly



leafcutter ants

## Emergent Layer



tapir



flying dragon



green anaconda

## Canopy



three-toed sloth

## Understory



silky anteater

## Forest Floor



brown capuchin

Photo credits: Strawberry poison frog, Marius Sund ([www.flickr.com/photos/mariusund/](http://www.flickr.com/photos/mariusund/)), CC BY 2.0. Howler monkey, GHans Hillewaert ([www.hillewaert.be](http://www.hillewaert.be)), CC BY-SA 3.0. Harpy eagle, Michael Schamis ([commons.wikimedia.org/wiki/File:Harpia\\_harpya\\_-\\_Belize\\_Zoo-8-3c.jpg](https://commons.wikimedia.org/wiki/File:Harpia_harpya_-_Belize_Zoo-8-3c.jpg)), CC BY 2.0. Toco toucan, Michele Frizzell Wells/National Wildlife Federation. Morpho butterfly, David Goehring ([www.flickr.com/photos/Carbonnyce/](http://www.flickr.com/photos/Carbonnyce/)), CC BY 2.0. Leafcutter ants, Kathy & sam ([www.flickr.com/photos/39871249@N07/](http://www.flickr.com/photos/39871249@N07/)), CC BY 2.0. Tapir, Marco Zanierri ([www.flickr.com/photos/tutotutto/](http://www.flickr.com/photos/tutotutto/)), CC BY-SA 2.0. Flying dragon, Charles J. Sharp ([commons.wikimedia.org/wiki/User:Charlesjsharp](https://commons.wikimedia.org/wiki/User:Charlesjsharp)), CC BY-SA 4.0. Green anaconda, Fernando Flores ([commons.wikimedia.org/wiki/File:Anaconda\\_\(Eunectes\\_marinus\).jpg](https://commons.wikimedia.org/wiki/File:Anaconda_(Eunectes_marinus).jpg)), CC BY-SA 3.0. Three-toed sloth, Marissa Strinella ([www.flickr.com/photos/imstrinella/](http://www.flickr.com/photos/imstrinella/)), CC BY 2.0. Silky anteater, Quinten Questel ([commons.wikimedia.org/wiki/File:Silky\\_Anteater.jpg](https://commons.wikimedia.org/wiki/File:Silky_Anteater.jpg)), CC BY-SA 3.0. Brown capuchin, Kate/Carine06 ([www.flickr.com/people/43555660@N00/](http://www.flickr.com/people/43555660@N00/)), CC BY-SA 2.0.

# Writing Lesson



## Writing Objectives

- ✎ Students will learn the differences between formal and informal language and when it is appropriate to use each in their writing.
- ✎ Students will demonstrate understanding by writing a formal persuasive essay about protecting the rainforests.

## Procedure

**Step 1:** Begin the lesson by telling students that you have won free tickets to the local zoo; however, you're not sure if you should go. Have students "persuade" you to go by giving reasons and specific examples.

**Step 2:** Tell students they will be using their persuasive skills to write an essay that will persuade others to save the rainforests. But first, they will be learning the difference between formal and informal language.

**Step 3:** Explain to students the differences between formal and informal language. You may wish to recreate the following chart on the board. Go over the chart with the class, and discuss when it is appropriate to use formal and informal language. Add to it if students have any further ideas.

Formal Language	Informal Language
avoids contractions	uses contractions
uses longer, more complex sentences	uses short, simple sentences
may use academic vocabulary	may use slang
uses general pronouns (ex: uses <i>one's</i> or <i>the reader's</i> )	uses personal pronouns (ex: addresses the reader as <i>you</i> or <i>your</i> )
avoids using clichés	uses colloquial expressions (ex: <i>kids</i> rather than <i>children</i> )
	uses abbreviations (ex: <i>TV</i> , <i>pics</i> , <i>stats</i> , etc.)

**Step 4:** Distribute copies of the *Proper or Casual?* activity sheet (page 22) to students. Have students complete the sheet independently, and go over the answers as a class. Answer any further questions students have regarding the use of formal or informal language.

**Step 5:** Distribute copies of the *Planning to Persuade* graphic organizer (page 23) to students. Tell students they need to convince the reader to save the rainforests by supplying them with sound reasons and specific examples. Remind students to thoughtfully choose their words and to use formal, proper language. Have students complete their graphic organizers independently and then review them with partners.

**Step 6:** Have students use their completed graphic organizers to write rough drafts of their essays. When students have finished their drafts, have them trade with a partner to proofread.

**Step 7:** After students have made corrections to their rough drafts, distribute copies of the *Persuading to Protect* sheet (page 24). Instruct students to use their best penmanship when they write their final drafts. Have student volunteers read their persuasive pieces to the class.



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

# Proper or Casual?

**Directions:** Using the correct tone in your writing is very important. Read each sentence below. Label it *Proper* or *Casual*.

1. Howler monkeys are so totally cool. \_\_\_\_\_
2. It is very important to conserve the tropical rainforests in South America. \_\_\_\_\_
3. I wanna visit the rainforest tomorrow! \_\_\_\_\_
4. Yeah, tapirs are funny-looking little dudes. \_\_\_\_\_
5. Anacondas are terribly frightening. \_\_\_\_\_

**Directions:** Read each scenario below. If it is okay to use casual English in that scenario, write "Yeah, totally!" If it is not appropriate, write "Absolutely not."

6. writing a text to your friend \_\_\_\_\_
7. writing an email to your cousin at summer camp \_\_\_\_\_
8. writing an informative paper for school \_\_\_\_\_
9. writing a letter to your principal \_\_\_\_\_
10. writing a persuasive essay for school \_\_\_\_\_

**Directions:** Now it's your turn. First, write a sentence using a *casual* tone. Then, write a similar sentence, but this time use a *proper* tone.

**Casual:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Proper:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WHEN ENGAGED  
IN PROPER DISCOURSE,  
ENDEAVOR TO UTILIZE  
VOCABULARY OF A MORE  
SOPHISTICATED NATURE.





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

# Planning to Persuade

**Directions:** How will you persuade people to save the rainforests? Use the graphic organizer below to help plan your persuasive essay.

Your Position/ Opinion	Reason #3	Support	Conclusion/ Final Thoughts
		Support	
		Support	
	Reason #2	Support	Conclusion/ Final Thoughts
		Support	
		Support	
	Reason #1	Support	Conclusion/ Final Thoughts
		Support	
		Support	





# Science Lesson



## Science Objectives

- 🐾 Students will learn about cycles of matter and energy transfer in a rainforest ecosystem.
- 🐾 Students will demonstrate understanding by performing an experiment in which they create a mini rainforest in a jar.

## Background

Rainforests get more than 100 inches of rain each year. Much of that rain is created by the rainforests themselves. Yes, it can water itself! This happens through the process of transpiration. Due to the consistent warm weather in the tropics, the trees in the canopy layer release water into the air to stay cool. This moisture rises and forms clouds over the rainforest. These clouds will soon get too heavy and release the water, thereby producing rain.

## Materials

- 🐾 clean glass jars (such as mayonnaise jars or pickle jars)
- 🐾 potting soil
- 🐾 gravel
- 🐾 small plants (such as moss, ferns, or grass)
- 🐾 water
- 🐾 plastic wrap
- 🐾 rubber bands

## Procedure

**Step 1:** Begin the lesson by reading the first column of “Forest Facts” on page 4 of the *Visit a Rainforest* book. Tell students that much of the rain that falls on a rainforest is created by the rainforest itself. Ask them to write a hypothesis in which they explain how they think this works. Write some of the student hypotheses on the board.

**Step 2:** Explain to students that they will be creating their own mini rainforests to help them understand how a rainforest creates its own rain. Place students in small groups. Instruct groups on how to create their own mini rainforest. Follow the steps below.

- 1: Place a layer of gravel in the bottom of the clean glass jar.
- 2: Add a layer (about two inches thick) of soil on top of the gravel.
- 3: Place the plants in the soil. Be sure the roots are covered.
- 4: Add water to dampen the soil.
- 5: Cover the top of the jar with plastic wrap. Place a rubber band around the plastic.

**Step 3:** Have groups label their jars with the name of their mini rainforest and place the jars in direct sunlight. The next day, distribute copies of the *Rainforest Watch* activity sheet (page 26) to students. Have them draw what they see in the jar over the next four days. Be sure students label their drawings. Have them record detailed written observations, as well.

**Step 4:** At the end of the four days, hold a class discussion about the experiment and go over student observations. Be sure to discuss the process of transpiration and evaporation.



### Scarlett's STEM Challenge!

It is important for scientists to study the plant and animal life in the canopy layer. Challenge students to build a model of a platform with a pulley system that would help scientists study the high and humid canopy layer.

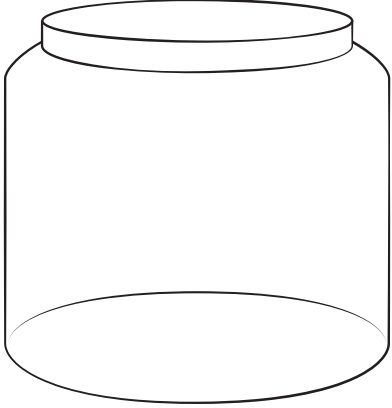


Name: \_\_\_\_\_

# Rainforest Watch

**Directions:** Observe your mini rainforest carefully over the next four days. Record your findings below. Be sure your drawings are detailed and labeled. Make sure your written observations are clear and thorough.

**Day 1**



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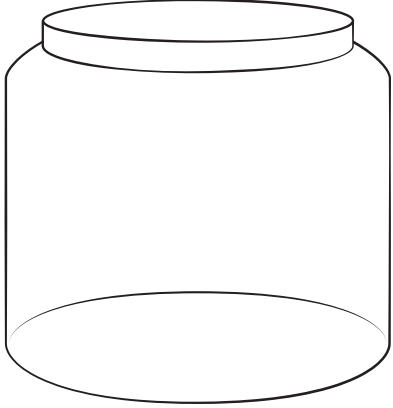
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**Day 2**



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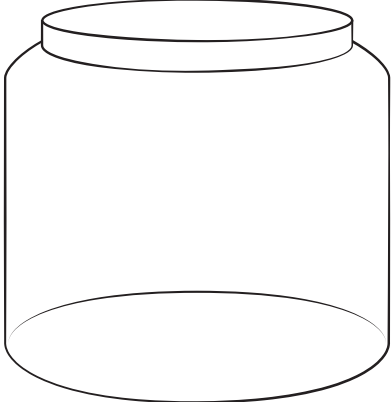
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**Day 3**



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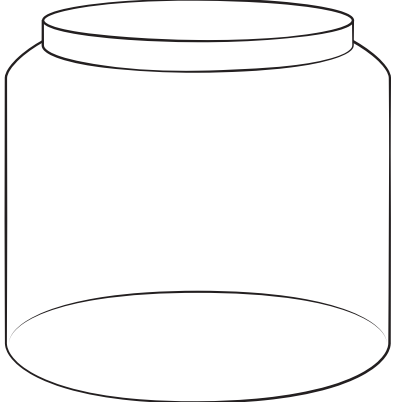
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**Day 4**



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# Running Record

Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Date: \_\_\_\_\_

Title: Visit a Rainforest Results: \_\_\_\_\_

Text	Errors	Self-Correction Meaning/Structure/Visual Clues
<p>If you could visit a tropical rainforest, what would it be like? What animals would you see? Well, here's one right in front of you. Come on in and see!</p> <p>As you walk deep into the rainforest, you notice how warm and moist the air feels—kind of like your bathroom after you take a hot shower. Looking around, you also notice that the light is pretty dim in here. That's because not much sunlight can get through the leaves of the trees towering above you.</p> <p>But maybe what you notice the most are the sights and sounds of <b>the</b> rainforest animals.</p>		

Comprehension Questions	Responses
What is this text about?	
What is the air like in a tropical rainforest?	
What does a tropical rainforest look like?	

Analysis of Reading Behaviors	Recommendations
Reads with understanding <i>easy   instructional   difficult</i>	
Self-corrects <i>always   mostly   sometimes</i>	
Self-corrects using mostly <i>meaning   structural   visual clues</i>	
Reads fluently <i>easy   instructional   difficult</i>	

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

## Multiple-Choice Quiz

**Directions:** Select the best answer for each question.

1. Which words best describe a tropical rainforest?
  - A. cold, dry
  - B. warm, moist
  - C. hot, windy
  - D. cool, breezy
2. Which is NOT a layer in a tropical rainforest?
  - A. forest floor
  - B. understory
  - C. canopy
  - D. atmosphere
3. In which layer would you find an anaconda?
  - A. forest floor
  - B. understory
  - C. canopy
  - D. atmosphere
4. Animals such as sloths and silky anteaters live in which layer?
  - A. forest floor
  - B. understory
  - C. canopy
  - D. atmosphere
5. Why do male howler monkeys howl?
  - A. because they like to sing
  - B. to attract female monkeys
  - C. to keep others out of their territory
  - D. because it attracts prey
6. Where are tropical rainforests located?
  - A. near the equator
  - B. near the South Pole
  - C. along the coast of the Pacific in North America
  - D. only in central Asia

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

# Short-Answer Test

**Directions:** Use evidence from the *Visit a Rainforest* text to help you answer the questions.

1. What animals might you find crawling around on the forest floor? Describe them.

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2. What is unique about the canopy layer?

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3. Why are people cutting down the rainforests? Why is this problematic?

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4. What does the rainforest have to offer to humans?

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# Ranger Rick's Adventure Cards

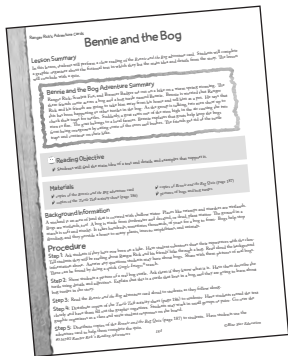
These vibrant and enjoyable cards provide students with the opportunity to read and discuss content, practice oral fluency, interpret story elements, and connect the text to self, to the readers, and to the activities in this guide. They also present the teacher with an opportunity to teach literature-based lessons interwoven with science content.

In addition to being the leader of a group of animal friends living in Deep Green Wood, Ranger Rick is also the star of a comic adventure series called “Ranger Rick’s Adventures.” The six adventures, which feature retro, comic book versions of Ranger Rick, Boomer Badger, and Scarlett Fox, are:

- 👤 “Bennie and the Bog”
- 👤 “Wyatt the Woodpecker”
- 👤 “Rainforest Romp”
- 👤 “Home on the Range”
- 👤 “Snow Safari”
- 👤 “Got Wildflowers?”



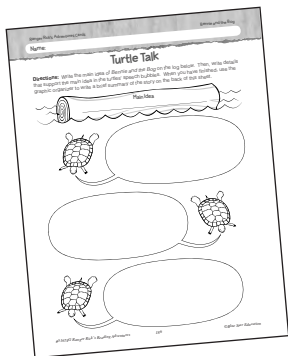
Below is a breakdown of the lesson plan that accompanies each of the six adventure cards.



This lesson plan page includes a summary of the lesson, a summary of the adventure card plot, and a literature objective that will be met in the lesson. Materials needed to complete the lesson are listed, and background information about the wildlife topic covered in the story is provided. Step-by-step instructions for teaching the lesson are also included.

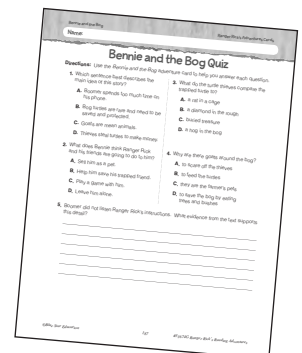
**Note:** The lesson calls for the teacher to read the card aloud to students. If desired, the students may read the card aloud as a class, in small groups, or in pairs to practice speaking and listening skills.

This black-and-white teacher resource page shows the four pages of the card on one page for the teacher to reference and make notes on, as needed, throughout the duration of the lesson.



This student activity sheet varies from lesson to lesson. It can be used as an informal assessment, an in-class activity, or as a homework assignment.

Each lesson concludes with a brief quiz. The quiz consists of four multiple-choice questions and one short-answer question to assess student comprehension of the text.



# Snow Safari

## Lesson Summary

In this lesson, students will perform a close reading of the *Snow Safari* adventure card. Students will think about the structure of the fictional text as they complete a story mountain graphic organizer. The lesson will conclude with a quiz.

### Snow Safari Adventure Summary

Ranger Rick, Scarlett Fox, and Boomer Badger are snowshoeing in the Rocky Mountains. The group comes across bear tracks and decides to follow them. From a safe distance, they see a bear and wolverine fighting over a dead mountain goat. The wolverine scares away the bear. The group of friends walks down and meets the wolverine. His name is Westin, and he explains he isn't worried about bears. Instead, he is worried about the fact that less snow is falling in the winter, and it is melting faster in the spring. This makes it hard for wolverines to dig burrows to keep their babies safe. Suddenly, snow machines race by and scare the group. Westin tells them more and more snow machines are showing up in the area and they scare him every time. Westin decides to return to the goat carcass, and the group accompanies him so that Ranger Rick can tell him the ways that some people are trying to help wolverines.



### Reading Objective

👉 Students will explain how a series of scenes fit together to provide an overall structure.

### Materials

👉 copies of the *Snow Safari* adventure card

👉 copies of *Snow Safari Quiz* (page 203)

👉 copies of the *Snowy Story Mountain* activity sheet (page 202)

👉 pictures of wolverines and the Rocky Mountains

### Background Information

Wolverines may look like small bears, but they are tough, fierce animals. They do not live in groups. They travel alone and roam many miles to find food. They tend to live in cold and remote regions. There are less than 300 wolverines in the “lower 48” states, and most of them are in the highest parts of the Rocky Mountains. Their existence is being threatened by the effects of global warming caused by the increase of greenhouse gases.

### Procedure

**Step 1:** Ask students if they know what a wolverine is. Some students may refer to the comic book character Wolverine. Explain that wolverines are real animals, and just like in the comic book, they are fierce and tough. Have them sketch a picture that shows what they think a real wolverine looks like.

**Step 2:** Read aloud the background information above. Answer any questions students may have about wolverines and global warming. Share with them pictures of real wolverines and the Rocky Mountains. These can be found by doing a quick *Google Images*® search.

**Step 3:** Read the *Snow Safari* adventure card aloud to students as they follow along.

**Step 4:** Distribute copies of the *Snowy Story Mountain* activity sheet (page 202) to students. Have students reread the text closely and have them fill out the graphic organizer. Students may work in small groups or pairs. Go over the graphic organizers as a class.

**Step 5:** Distribute copies of the *Snow Safari Quiz* (page 203) to students. Have students use the adventure card to help them complete the quiz.

# Snow Safari (cont.)

**Ranger Rick's ADVENTURES**  
STORY BY GERRY DESSER, ART BY THE CHARACTERS!  
**Snow Safari!**

RANGER RICK RACCOON, SCARLETT FOX, AND BOOMER BADGER ARE SNOWSHOEING HIGH IN THE ROCKY MOUNTAINS.

Sure is beautiful up here.

Yep—I love this powdery snow!

But these snowshoes are a big pain!

I'm getting rid of them and trusting my own two feet!

Oooooo!

Have some patience, Boomer. You'll get the hang of walking in those things.

The snow is too soft and deep to walk on without those shoes, Boom.

A FEW MINUTES LATER...

Help! I'm stuck!

Here, grab my paw, put your shoe back on, and let's keep going.

Look! Tracks!

These are huge! What could have made them?

Gotta be a grizzly bear!

But don't bears hibernate in winter?

Yep, but I hear it's been warm around here lately. Maybe the bear woke up to look for food. Come on, let's see where these go!

Come on, Boomer. We'll keep our distance if we see the bear.

What—are you crazy?

Uh-oh, what's that?

We'll be able to see from the top of this hill!

Whoa—look!

That smaller animal is a wolverine, and it's guarding the dead mountain goat it found.

But that guy doesn't have a chance against that huge bear!

Don't be so sure.

RRRAWRRR!

GRAAAAAHHH-RAAAAAHHH!

That little wolverine won!

Let's go introduce ourselves.

Yeah, right. You two go ahead. I'll wait here.

Hello, there. I'm Ranger Rick Raccoon and this is Scarlett Fox.

Well, this is an honor! I've heard all about you two!

And that guy back there is Boomer Badger.

I'm Westin. Welcome to the Rockies!

Glad to be here, Westin.

And glad you were able to chase off that grizzly! Here comes our friend Boomer.

Oh, grizzlies are nothin'. We wolverines have other things to worry about.

WESTIN TELLS HIS NEW FRIENDS THAT LESS SNOW HAS BEEN FALLING IN WINTER, AND IT MELTS FASTER IN SPRING. THAT'S TROUBLE FOR MOTHER WOLVERINES, WHICH DID DEEP BURROWS IN SNOW FOR RAISING BABIES. IF THE SNOW MELTS TOO SOON, PREDATORS CAN FIND THE DENS AND KILL THE LITTLE ONES.

WAAAAA WAAAAA WAAAAA WAAAAA

Oh, NO! They're coming!

What's coming, Westin?

Snow machines! Run!

Hurry, Boomer—they're catching up to you!

Boomer, you OK?

Yeah—just a bit shook up, I guess.

Let's go see how Westin is doing.

A MOMENT LATER...

I'm amazed to see those things way up here!

Me too.

Lots more are coming to the high country, and they scare me every time!

Even more than a grizzly, huh?

But that old goat was mostly bones.

Hi! With THESE teeth and jaws, bones are like dessert!

So I guess that grizzly was smart to leave you alone.

Ah—that reminds me! I was enjoying a nice meal before that bear came along.

That's right—wolverines are super tough! Put too bad that won't fix ALL our problems!

Well, people are trying to help wolverines increase in number, Westin. I'll tell you more about it while you're eating those goat bones!

**MORE FACTS**

- Wolverines live in some of the coldest, snowiest places on Earth. Most live in Canada, Alaska, and Russia. But fewer than 300 still live in the "lower 48" states—mostly in the highest parts of the Rocky Mountains.
- Rick's good news for Westin is that scientists are studying wolverines to learn more about what they need to survive. Others are trying to control global warming. And still others are trying to get the U.S. and state governments to do more to protect them.
- Wolverines can travel for hundreds of miles over deep snow to find the food they need. Their huge, flat feet act as snowshoes, keeping them from sinking in too far.
- Wolverines will eat almost anything they find, dead or alive. They're so fierce and powerful that they can bring down deer and other animals many times their size.

Ranger Rick



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

# Snowy Story Mountain

**Directions:** Use the *Snow Safari* adventure card to complete the story mountain graphic organizer.

**3. Climax**  
(problem or conflict)

**4. Falling Action**  
(what happens after the climax)

**5. Resolution**  
(solving the problem)

**6. Conclusion**  
(what the characters have learned/  
how they have changed)

**2. Rising Action**  
(events leading to problem)

**1. Introduction**  
(characters & setting)

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

# Snow Safari Quiz

**Directions:** Use the *Snow Safari* adventure card to help you answer each question.

1. What word do you think best describes Westin the wolverine?
  - A. sad
  - B. angry
  - C. tough
  - D. silly
2. Why do you think Boomer is nervous about meeting Westin?
  - A. He is afraid the bear will come back and get him.
  - B. He is scared of Westin because he just saw Westin scare away a bear.
  - C. He doesn't like wolverines.
  - D. He's tired and doesn't want to walk anymore.
3. What is the climax in this story?
  - A. There are not enough goats for the wolverines to eat.
  - B. There are too many bears roaming the mountains.
  - C. There is too much snow in the winter months.
  - D. Less snow is falling in the winter, and it is melting faster in the spring.
4. What scares Westin more than bears?
  - A. snowstorms
  - B. snow machines
  - C. Boomer Badger
  - D. Ranger Rick
5. Why is less snow a problem for wolverines?

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# My Ranger Rick Adventures

One of the unique writing activities included with this kit is the student-created graphic adventures. Students will be given a two-page comic strip with missing dialogue. Students are to fill in the missing dialogue, thereby creating a fun and educational narrative of their own. These can be distributed following a unit or as a culminating activity. They can be completed individually, in pairs, or in small groups.

Before distributing copies of the blank graphic adventures, be sure to thoroughly discuss the following topics with students.

## Story Elements

As a class, examine the different elements of a story, including the following:

1. introduction (*characters & setting*)
2. rising action (*events leading to problem*)
3. climax (*problem or conflict*)
4. falling action (*what happens after the climax*)
5. resolution (*solving the problem*)
6. conclusion (*what the characters have learned/how they have changed*)



Remind students that their comic strip should tell a story and show movement or growth from beginning to end. A lesson should be learned, a problem should be solved, or an adventure should be completed. By using the story elements above to help design an adventure, students will be able to create a fun and engaging story.

**Note:** It may be helpful to discuss these elements in the form of a story mountain diagram. Such a diagram was used on page 202 in this teacher's guide.

## Dialogue

Explain to students what dialogue is and how to use it correctly in a story.

- 🐾 Tell students that an entire story can be told simply by characters speaking to one another. If possible, provide examples (such as comic strips) from a local newspaper.
- 🐾 Remind students that the dialogue bubbles are limited, so their dialogue must be concise and meaningful.
- 🐾 Challenge students to try to insert wit and humor into their dialogue.

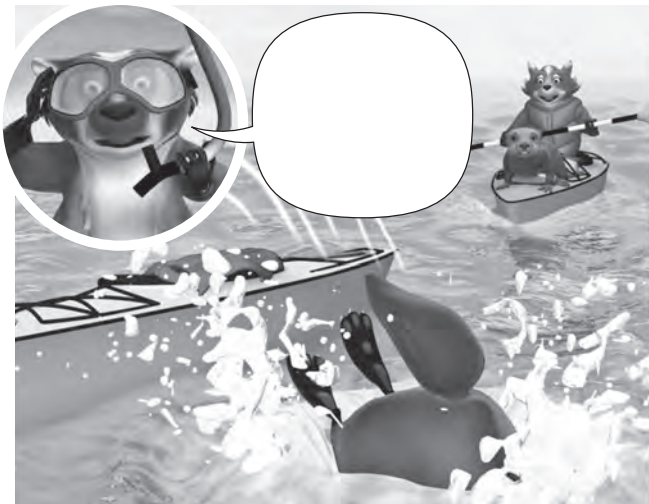
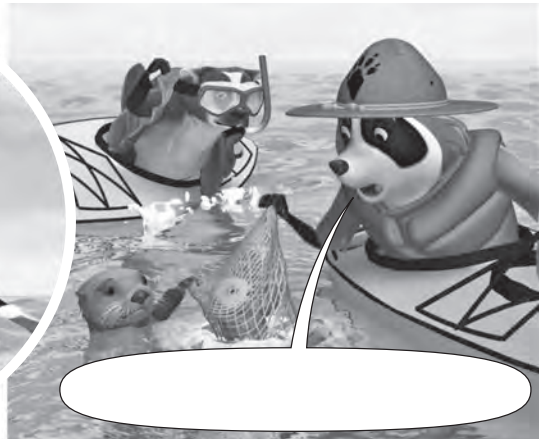
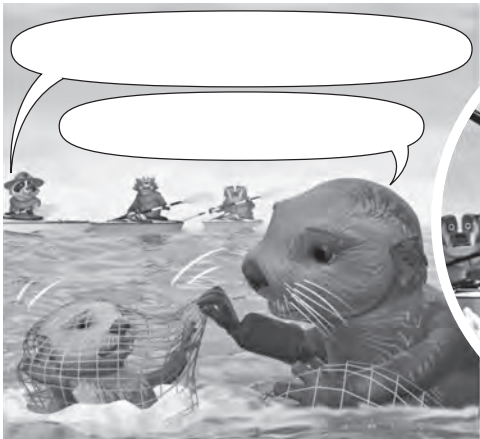
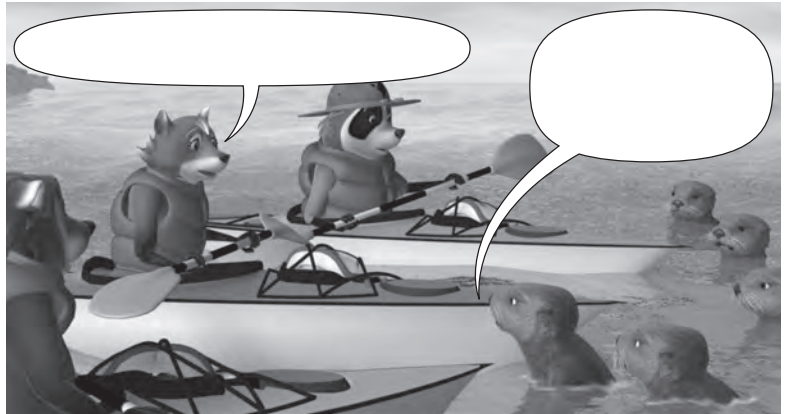
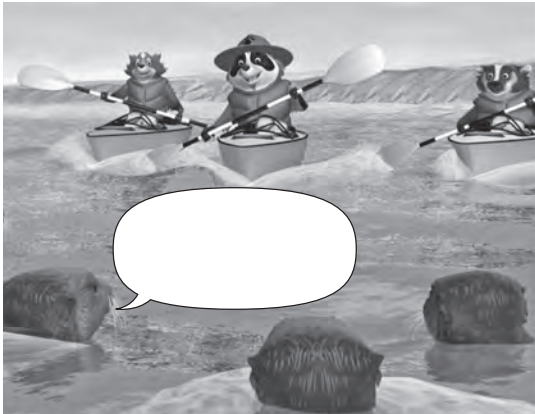
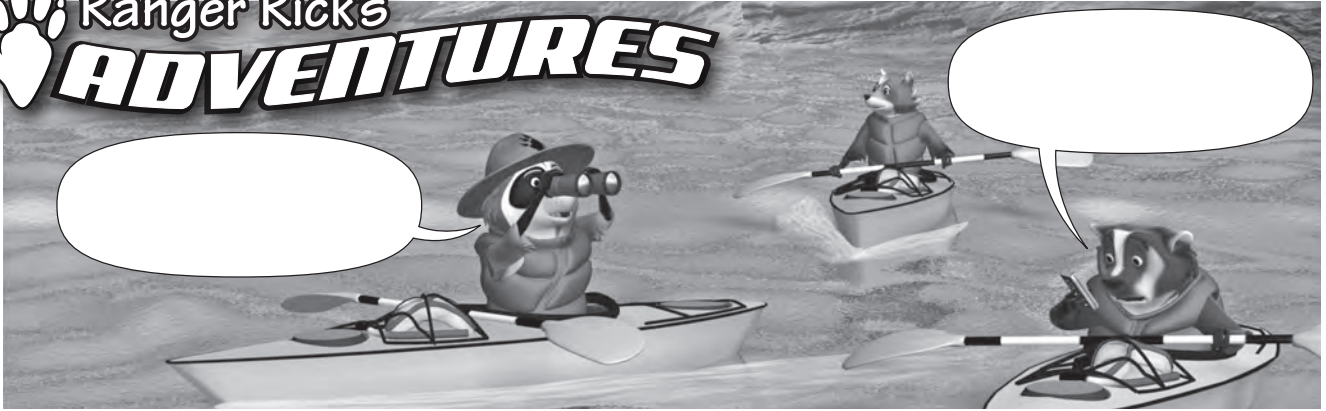
## Be Creative & Have Fun!

Remind students that this assignment is not meant to be stressful or difficult. It is meant to be a fun yet challenging project in which they can show off their creativity and authoring skills. Many different stories could be told with each blank graphic adventure, thus allowing for many entertaining possibilities. When students have completed their graphic adventure stories, encourage them to color the stories and then share them with friends and family.



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

# Ranger Rick's ADVENTURES



# Ranger Rick's 5 ADVENTURES

STORY BY GERRY BISHOP; ART BY THE CHARACTERSHOP

## Snow Safari

RANGER RICK RACCOON, SCARLETT FOX, AND BOOMER BADGER ARE SNOWSHOEING HIGH IN THE ROCKY MOUNTAINS.

Sure is beautiful up here.

Yep—I love this powdery snow!

But these snowshoes are a big pain!





Uh-oh, what's that?

We'll be able to see from the top of this hill.



Whoa— look!

That smaller animal is a wolverine, and it's guarding the dead mountain goat it found.



But that guy doesn't have a chance against that huge bear!

Don't be so sure.



RRRAWRRR!



GRAAAHHH-RAAAHHH!



That little wolverine won!

Let's go introduce ourselves.

Yeah, right. You two go ahead. I'll wait here.



Hello, there. I'm Ranger Rick Raccoon and this is Scarlett Fox.



Well, this is an honor! I've heard all about you two!

And that guy back there is Boomer Badger.

I'm Westin.  
Welcome to the  
Rockies!

Glad to  
be here,  
Westin.

And glad  
you were able to chase  
off that grizzly! Here  
comes our friend  
Boomer.



Oh, grizzlies  
are nothin'. We  
wolverines have  
other things to  
worry about.

WESTIN TELLS HIS NEW FRIENDS THAT LESS SNOW HAS BEEN FALLING IN WINTER, AND IT MELTS FASTER IN SPRING. THAT'S TROUBLE FOR MOTHER WOLVERINES, WHICH DIG DEEP BURROWS IN SNOW FOR RAISING BABIES. IF THE SNOW MELTS TOO SOON, PREDATORS CAN FIND THE DENS AND KILL THE LITTLE ONES.



Oh, NO!  
They're  
coming!

WAAAAA  
WAAAAAA  
WAAAAAA  
WA

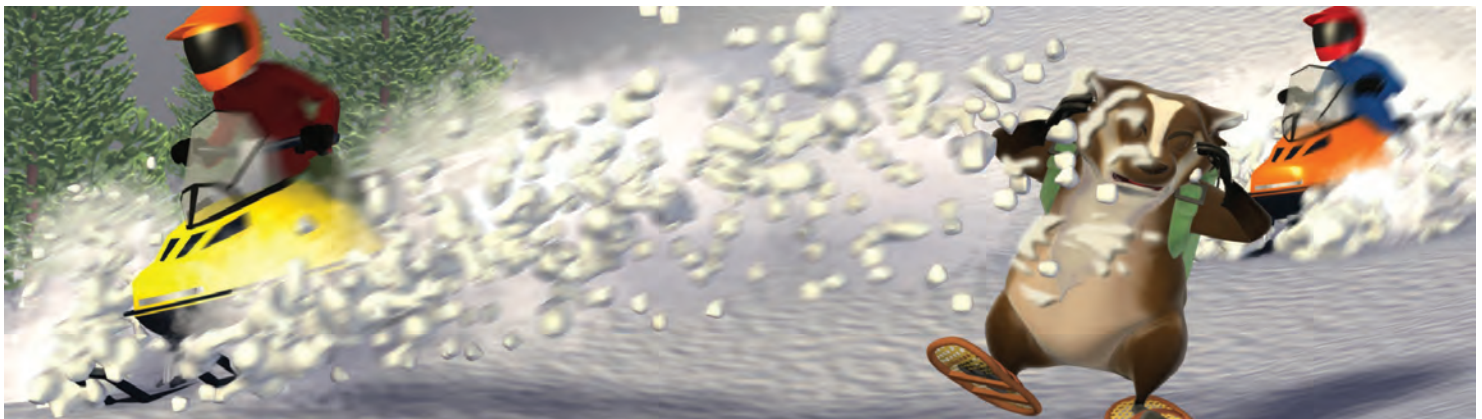


What's  
coming,  
Westin?

Snow  
machines!  
Run!



Hurry,  
Boomer—they're  
catching up to  
you!





Boomer, you OK?

Yeah— just a bit shook up, I guess.



Let's go see how Westin is doing.

A MOMENT LATER . . .



Glad everyone's OK!

Me too.



I'm amazed to see those things way up here!

Lots more are coming to the high country, and they scare me every time!

Even more than a grizzly, huh?



But that old goat was mostly bones.

Ah— that reminds me! I was enjoying a nice meal before that bear came along.



Ha! With THESE teeth and jaws, bones are like dessert!

So I guess that grizzly was smart to leave you alone.



That's right— wolverines are super tough! But too bad that won't fix ALL our problems!!

Well, people are trying to help wolverines increase in number, Westin. I'll tell you more about it while you're eating those goat bones!

## MORE FACTS

- Wolverines live in some of the coldest, snowiest places on Earth. Most live in Canada, Alaska, and Russia. But fewer than 300 still live in the “lower 48” states— mostly in the highest parts of the Rocky Mountains.
- Rick’s good news for Westin is that scientists are studying wolverines to learn more about what they need to survive. Others are trying to control global warming. And still others are trying to get the U.S. and state governments to do more to protect them.
- Wolverines can travel for hundreds of miles over deep snow to find the food they need. Their huge, flat feet act as snowshoes, keeping them from sinking in too far.
- Wolverines will eat almost anything they find, dead or alive. They’re so fierce and powerful that they can bring down deer and other animals many times their size.







- Rainforests of the world. (All species in this book are from South or Central America, except for the periwinkle and flying dragon.)

## FOREST FACTS

- 🍃 The rainforests in this story are *tropical* rainforests, because they are close to the **equator** (see map above).
- 🍃 The average temperature in tropical rainforests is between 70°F and 85°F.
- 🍃 Rainforests get more than 100 inches of rain a year. Lots of evaporated water in the air makes them feel steamy.
- 🍃 Rainforests cover only about six percent of the planet, but they contain more than half the world's plant and animal species.
- 🍃 Chocolate, bananas, nuts, tea, spices, rubber, and woods such as teak and balsa all come from rainforests.
- 🍃 People cut down rainforest trees for lumber or to clear the land for farms and ranches. Each second, an area of rainforest the size of a football field is destroyed. But many people are working hard to protect rainforests.

South America's Amazon rainforest is the biggest in the world. It covers an area about the size of the "lower 48" states.

Rainforests absorb carbon dioxide in their tree trunks and leaves. When they're cut down, the carbon dioxide is released into the **atmosphere**, which can increase global warming.

## RAINFOREST LAYERS

The rainforest has four main layers, each different from the next. Many animals spend their whole lives in the same layer. Others move among different layers.

emergent layer

canopy

understory

forest floor

## LEAFY DRUG STORE

Hundreds of rainforest plants are used to make medicines. Chemicals in the *Madagascar periwinkle*, for example, are used to treat diabetes and some kinds of cancer.



# FOREST FLOOR

This level, the lowest of the forest, gets little light. Because of all the moisture, fallen leaves and trees **decay** quickly. A leaf that might take a year to decay in your backyard could disappear in six weeks on the rainforest floor! These are some of the animals you might meet here.

Be careful not to step on this *green anaconda* (an-uh-KON-duh). It blends in with the leaves on the forest floor. But these snakes often hang out in the water, too. Like its relative, the boa, an anaconda squeezes its prey to death. This snake's prey includes turtles, fish, wild pigs, tapirs, and even deer.



SOME ANACONDAS  
CAN BE ALMOST AS LONG  
AS A SCHOOL BUS!



The male *cock-of-the-rock* is famous for putting on a show to attract females. Each male has a spot on the forest floor where he puffs up his feathers and “dances,” while calling and making other sounds. If a female is impressed with a certain male, she’ll choose him as her mate.

The *tapir* (TAY-pur) is a land animal, but it spends lots of time in the water, too. See its little “trunk”? It works as a finger to grab leaves, fruits, and other food. When the tapir is underwater, it uses its trunk as a **snorkel** to breathe!



forest floor