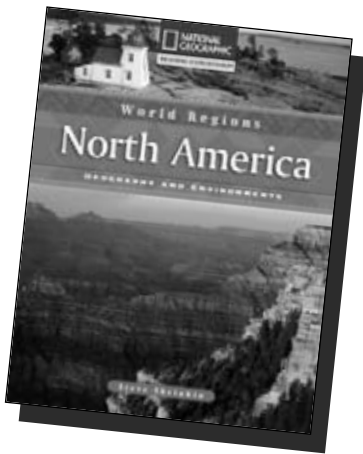


Overview

North America: Geography and Environments

By Steve Sheinkin



Summary

In this book, students will explore different ways people interact with the continent of North America. In the Rocky Mountain region, students will read about how people seek a balance between using the vast natural resources and protecting the land and wildlife there. The warm waters of the Gulf of Mexico also support industries as well as valuable ecosystems. Students will read about protection of wetlands of the Florida Everglades and the coral reefs in the Caribbean. In the Great Lakes region, students will find that much life and work in the region have grown around the transportation routes that the waterways provide. Finally, students will investigate how people and animals have adapted to living in the tundra in the northern regions of Alaska, Canada, and Greenland.

Background

North America is the world's third-largest continent, covering about one sixth of the world's total land area. It includes Canada, the United States, Mexico, Central America, and the Caribbean islands, as well as Greenland. North America is the only continent in which every type of climate is present, from Arctic to tropical.

There are few people in the far northern part of the continent or in the western deserts of the United States. There are many cities along the eastern Great Lakes, the St. Lawrence River, and the Atlantic Coast. In recent decades, many people have moved from the northeastern and midwestern United States to the southwestern and Gulf Coast areas. In Central America, most people live in the cool highlands.

Learning Objectives

Social Studies/Geography

- Examine the interactions of humans and their environments
- Interpret representations of Earth, such as maps
- Locate and describe landforms and features such as mountains and gulfs
- Describe physical processes and identify geographic patterns associated with them
- Explore causes, consequences, and possible solutions to global issues such as pollution and endangered species

Process Skills

- Skill Focus**
- Analyze an aerial photograph
- Supporting Skills**
- Use images to reinforce comprehension
 - Read a map
 - Generalize

Reading Skills

- Identify main ideas and details
- Draw conclusions
- Compare and contrast
- Use context clues
- Recognize cause-and-effect relationships
- Use graphics and graphic organizers

Focus on Content Area Reading

Before Reading

Activate Prior Knowledge

Ask students to name three unique geographical features of the region in which they live. Write these features on the board. Then, write the names of four regions of North America—Rocky Mountains, Gulf of Mexico and Caribbean, Great Lakes, and Arctic. Ask students which region is most like the one they live in. Which seems the most different? You might have them create a graphic organizer such as the one below.



Meeting Individual Needs

For specific strategies on meeting individual needs, see pages 80–85.

Our Region	
How is it similar to a region in North America?	How is it different from a region in North America?

Chapter 1: Rocky Mountains

Before Reading

Preview & Set Purpose

Give students time to preview the chapter, especially headings, subheadings, and features. Ask:

Does the subhead called “Young Mountains” on page 11 surprise you at all?

What do you expect to read about in that section?

Can you predict what some of the “Rocky Mountain Resources” on page 14 might be?

To help students set a purpose for reading, have the class generate more questions such as the ones listed above. Write these questions on the board. Tell students they will be reading to answer questions such as these.



Vocabulary Strategy: Determine Word Knowledge Activity Master, page 56

Explain to students that when they read a word and they are not sure of its meaning, they should think of what parts of the word they already know. Using the Activity Master, students can write their ideas about the meaning of each word in the first column. Sometimes parts of words or terms may provide clues, such as “fuel” in *fossil fuel* or “geo” in *geologist*. Remind students that for this part of the activity, it is acceptable to guess. Then, in the second column, have students find meanings in context while they read the chapter, “Rocky Mountains.” To extend learning, have students use what they’ve learned to write a paragraph about issues that people of the Rocky Mountains face, using six or more words from the list.

Correlation to National Standards

Writing/Communication Skills

- Find facts about a topic
- Conduct research
- Use the writing process (prewriting)
- Write descriptively
- Write persuasively
- Create and deliver a multimedia presentation

Reading/Language Arts

- Read to become informed about the needs of society
- Apply a wide range of strategies to comprehend texts
- Use written and spoken language for learning
- Use the writing process
- Conduct research

Social Studies

- Culture
- Time, Continuity, & Change
- People, Places, & Environments
- Production, Distribution, & Consumption
- Science, Technology, & Society
- Global Connections

Geography

- The World in Spatial Terms
- Places and Regions
- Environment and Society
- Physical Systems
- Human Systems
- The Uses of Geography

Focus on Content Area Reading (continued)

During Reading

Read Strategically: Use Images to Reinforce Comprehension

As students read, direct their attention to the maps, photos, and diagrams. Ask students to choose three graphics from the chapter and, for each, write a sentence or more that tells how the graphic relates to the text in the chapter. Model this example, using the photograph on page 12:

This photograph shows the Grand Canyon, which was carved over millions of years as the Colorado River wore away a deep groove in the Colorado Plateau.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

What is the Continental Divide? (See page 12.)
(**summarize**)

Why do you think railroads were built in Colorado after the discovery of gold in 1859? (See page 14.)
(**make inferences**)

What are two opinions about how forest fires can be controlled? (See page 16.)
(**fact and opinion**)

What are some of the activities that residents and tourists enjoy in the Rocky Mountains? (See pages 18–19.) (**summarize**)

Writing:

Write a Journal Entry

Have students reread the journal entry in the “Meet John Wesley Powell” feature on page 13. Then ask students to choose one of the scenarios below and write a journal entry from that point of view.

- You are a new settler to the Rocky Mountains in 1860, the year after George Jackson first discovers gold there. Write a journal entry about why you moved to the Rocky Mountains, what the journey was like, what you found when you got there, and how the growth of the area is quickly changing your daily life.
- You are a tourist visiting the Rocky Mountains. Write a journal entry in which you describe the places you’ve seen. What landforms and animals do you encounter, and what activities do you experience?

Chapter 2: Warm Waters

Before Reading

Preview & Set Purpose

Give students time to preview the chapter, paying special attention to the photographs and other images. Have them read the chapter opener text on page 22 and study the photograph. Ask:

What kinds of events or human impacts do you think could change the warm waters region of North America?

What kinds of “fragile ecosystems” do you expect to read about in this chapter?

To help students set a purpose for reading, ask them to use their skills of predicting. Based on the chapter’s title, what areas of North America do students predict they will be reading about? What do they predict life in these places might be like? Have students read to compare their predictions with facts in the chapter.

Vocabulary Strategy:

Relate Words

Explain to students that all of the words in this chapter relate to the physical geography of North America’s warm water region. Because the words relate to the same topic and to each other, explain to students that using the words together is a good strategy for learning. Have students work in pairs. First, each pair should use the chapter to determine definitions for each word. Then one student should choose two words from the list and ask his or her partner to use the words together in a written sentence or group of sentences. Then the partners should switch, using a different combination of words. When each partner has written several sentences, they should share their sentences and discuss the meanings of the words.

Focus on Content Area Reading (continued)

During Reading

Read Strategically: Identify Main Ideas and Details

Activity Master, page 57

Have students use the Activity Master to help them organize main ideas and supporting details of the chapter. Students should identify each statement as a main idea or a detail in the first two boxes. Then students can fill in the main idea and details in the third box.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

How is a gulf different from a sea? (See page 24.)

(compare and contrast)

What is the cause of the dead zone in the Gulf of Mexico?

(See page 27.)

(cause and effect)

What are some of the benefits that wetlands provide to humans, animals, and plants?

(See page 31.) (summarize)

What are two opinions about restoring the flow of water into the Everglades? (See page 33.)

(fact and opinion)

Writing and Research:

Write a Research Report

Have students research wildlife habitats of the warm waters region. Students can include human impacts on wildlife environments and also what at

least one organization is doing to protect plants and animals of the region. Have students work in small groups to write a short report on animal life in the region. Reports should include names of and facts about at least three different animals. Include what the animals look like, what they eat, what their natural habitats are, whether or not they are endangered, and how the environment of the region affects each animal. Students can use a variety of resources, including the Web site www.nationalgeographic.com/wildworld, which features information about wildlife living in different ecoregions.

Communicating: Create a Multimedia Presentation

Have students organize information from their research in a multimedia presentation, including maps and pictures of the wildlife and habitats selected. Suggest creative strategies for presentations such as asking questions of the audience, having the audience make predictions about the group's findings, or playing tape-recorded sounds.

Chapter 3: Great Lakes

Before Reading

Preview & Set Purpose

Give students time to preview the chapter, paying special attention to headings, maps,

photographs, and graphics. To help students set a purpose for reading, have them read the question on page 38: "How have the transportation routes and resources of the Great Lakes influenced this region's development?" Then ask:

How do you expect people of the Great Lakes region to live differently from people of the warm waters and Rocky Mountains regions? What do you think might be important to know about this region?

Vocabulary Strategy:

Use Specialized Words

Draw students' attention to the words *glaciers* and *ice age* on page 41 and *evaporates* on page 46. Explain that each of these specialized words relates to water in some way. Have students organize these words in a concept map. Students can relate each word to water in a sentence.

During Reading

Read Strategically:

Distinguish Fact from Opinion

Direct students' attention to pages 41–42. Write these two statements on the board:

Glaciers are awe-inspiring.

The St. Lawrence River flows 750 miles (1,200 kilometers), connecting Lake Ontario to the Atlantic Ocean (page 42).

Ask students to determine which sentence expresses fact and which expresses opinion. What "clue" words can help

Focus on Content Area Reading (continued)

them identify opinion statements? (value words such as *great* or *terrible*) Then ask students to create a chart with three facts and three opinions from the Great Lakes chapter.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

What were some effects of the Earth's most recent ice ages?
(See page 41.)

(cause and effect)

How does the water in Niagara Falls help people of the Great Lakes region?
(See pages 48–49.)

(summarize)

Writing: Write a Letter

Activity Master, page 58

Have students use the Activity Master to plan and write a letter from one of the perspectives listed. Have students use the traditional letter format.

Strategy Tip: Reread

Remind students to reread the letter they are writing for the Activity Master on page 58 after they have finished it. Have them check to see that they have answered all the questions in the activity. Have them ask themselves as they reread whether the answers they have given are consistent with the viewpoints of the person they have chosen.

Chapter 4: The Far North

Before Reading

Preview & Set Purpose

Give students time to preview the chapter, noticing especially headings, maps, photographs, and graphics. Ask:

What do the headings and photographs tell you about the climate of this region? How might this environment affect humans, and vice-versa.

To help students set a purpose for reading, have students use the K-W-L Graphic Organizer on page 109 in pairs or small groups. Remind them that the organizer helps them to identify what they already know about the Far North, what they want to know about the region, and, after reading, what they have learned.

Vocabulary Strategy:

Use Context Clues

Using the Graphic Organizer on page 110, have students work in pairs or individually to find meanings for the bold-faced words in the chapter.

During Reading

Read Strategically: Recognize Cause-and-Effect Relationships

Graphic Organizer, page 107

Have students use the Graphic Organizer to record cause-and-effect relationships as they read. Help students get started by modeling one cause-and-effect relationship, such as:

Cause: *The northern hemisphere is tilted away from the sun in winter.* Effect: *The town of Resolute receives little sunlight from November through February.*

After Reading

Responding

Initiate a class discussion to assess reading comprehension. Ask:

What is the Arctic National Wildlife Refuge and why was it created? (See pages 56–57.)

(summarize)

Writing:

Write an Opinion Column

Have students imagine they are columnists for a community newspaper in the Far North. Explain that a newspaper columnist writes opinion articles rather than reporting on the facts. Have students choose one of the two sides in the Arctic National Wildlife Refuge debate (see page 57). Then have students write a newspaper column stating which side they picked and why.

Extend and Assess

Focus on Geography



Think Geographically: Analyze an Aerial Photograph

Activity Master, page 59

Have students complete the Activity Master by comparing the photograph of Toronto with the map and then answering the questions. Students should use map-reading skills and their own prior knowledge.

Assessment Options

Questions

Use the following questions during individual conferences, or ask students to write the answers in their notebooks:

- 1 Name the four regions of North America and one natural resource found in each.
- 2 How were the Rocky Mountains formed?
- 3 What kind of ecosystem is found in the Florida Everglades?
- 4 How is the geography of the Great Lakes region related to the economy of that region?
- 5 How might oil drilling in Alaska affect the tundra ecosystem?

Assessment Activity

Have students work in small groups or individually to create educational posters of “Human-Environment Interaction in North America.” Each poster should have a map of North America in the center showing the four regions, each shaded a different

color and labeled (including major landforms). For each region, have students add two text boxes to the map, showing one way that each region affects how people live, and one way that people affect the environment. For each text box students can create or find a picture, then add a caption on an index card. Students can connect each card to its region using string or lines drawn carefully with a ruler.

Posters should:

- ✓ Show an understanding of how humans interact with the environment.
- ✓ Have captions that convey appropriate information.
- ✓ Be legible and be written in grammatical English.

Multiple-Choice Test

Use the test on page 100.

Cross-Curricular Connection

Science

Using the vocabulary in Chapter 3 to begin, ask students to study the water cycle. Students can use science texts, library books, or approved Internet sites for research. They might start at this Web site on the water cycle: www.epa.gov/OGWDW/kids/cycle.html.

Home-School Connection

Ask students and parents to review *North America: Geography and Environments*

together and choose one topic they want to explore further. They can then do Internet or library research to learn more about the topic.

Resources

Web Links

To learn more about the Yellowstone National Park visit:

www.nationalgeographic.com/destinations/Yellowstone_National_Park/index.html

For activities about hurricanes, see:

www.nationalgeographic.com/ngkids/trythis/tryfun3.html

For a Canadian site on the Great Lakes, see:

<http://www.on.ec.gc.ca/water/greatlakes/intro-e.html>

For more on the state of Alaska, see:

www.state.ak.us/kids/

Articles from *National Geographic*

“Grizzlies: Their Fate Is in Our Hands”: July 2001

“Under the Volcano: Montserrat”: July 1997

“The Everglades: Dying for Help”: April 1994

“The Great Lakes: Down the Drain?": September 2002

“Oil Field or Sanctuary?": August 2001

Vocabulary: Determine Word Knowledge

Use what you know about the words below to write good definitions in the left-hand column. Then use the “Rocky Mountains” chapter, the glossary, or a dictionary to write full, correct definitions for the words in the right-hand column. How close were your answers to the real definitions? Now use the words in sentences on a separate sheet of paper.

Ideas About Word Meaning:	Actual Meaning:
tectonic plate	
geologist	
erode	
Continental Divide	
fossil fuel	
habitat	
drought	
geyser	
tree line	

Read Strategically: Identify Main Ideas and Details

The main idea of each section is what that section is mostly about. Details give more information about the main idea. For the Gulf of Mexico and the Everglades, three statements are listed. Decide whether each statement is a main idea or a detail. Write **M** in the blank space for the main idea. Write **D** for each of the details. For the West Indies, write your own main idea and two details.

The Gulf of Mexico

- _____ 1. Water above the continental shelf in the Gulf of Mexico is only about 330 to 660 feet deep.
- _____ 2. The Gulf of Mexico is an area of the Atlantic Ocean surrounded by coastal plains.
- _____ 3. Flounder, red snapper, and crabs are some of the most valuable fish from the Gulf of Mexico.

The Florida Everglades

- _____ 1. The Everglades National Park includes less than half of the Everglades.
- _____ 2. Panthers, alligators, and turtles make their homes in the Everglades.
- _____ 3. The Everglades is an area of wetlands and home to a unique and valuable ecosystem.

The West Indies

Main Idea: _____

Details _____

1. _____

2. _____

Writing: Write a Letter

Choose one of the viewpoints below or invent your own. Then answer the questions below to prepare for writing a letter about the Great Lakes region. When you have completed the questions, you will be ready to write your letter on another sheet of paper.

- You are the French explorer Jean Nicolet in 1634, and the Huron have led you to Lake Michigan—but you think it is the Atlantic Ocean. Write a letter to the French king explaining your findings.
- You are Henry Ford. It is 1903 and you have just started the Ford Motor Company. Write a letter to someone who wants to invest money in your company. Explain why you chose Detroit, and what you hope to accomplish.
- You are a farmer in the Great Lakes region. Write a letter to a farmer in another region who is considering buying a farm near you. Be specific about where you live and how your location helps you be successful as a farmer.
- You are a visitor to the Great Lakes region. Where are you traveling? What do you see? Write a letter to a friend describing the region.

1. Who are you? What is your name, your job, and your reason for being in the Great Lakes region?

2. To whom are you writing? What is his or her name and relationship to you?

3. Why are you writing a letter to this person? _____

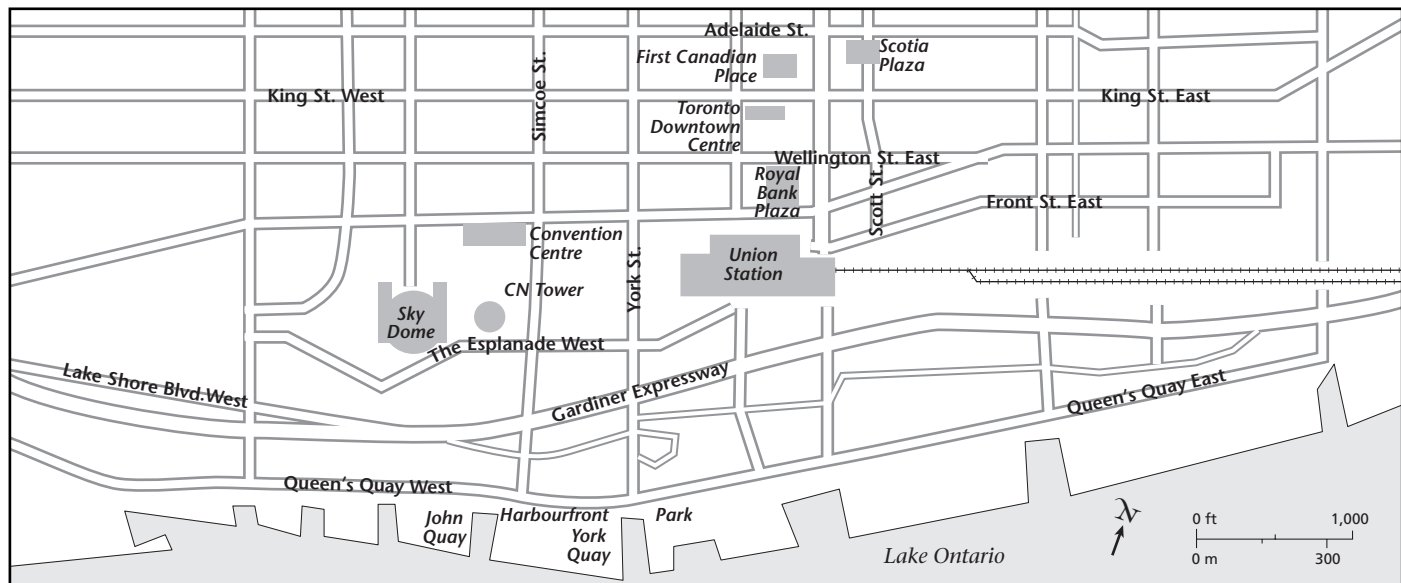
4. What facts about the Great Lakes region could your letter include? _____

5. What opinions about the region could your letter include? _____

6. How will you end your letter? _____

Think Geographically: Analyze an Aerial Photograph

Find the photograph of Toronto on page 40 in *North America: Geography and Environments*. The map below shows a portion of the same section of downtown Toronto as the photograph. Compare the photograph to the map. Then answer the questions below.



1. Find the high tower in the photograph. Using the map, find the tower's name.

2. What is the rounded structure next to the tower? What might it be used for?

3. What is the body of water in the photograph? What kinds of activities and business might you find along the water?

4. As you view the photograph, in what direction are you looking?

5. If you were walking in the city and got lost, how could you use the high tower and the body of water to help you figure in which direction you were walking?

