

Overview

Summary

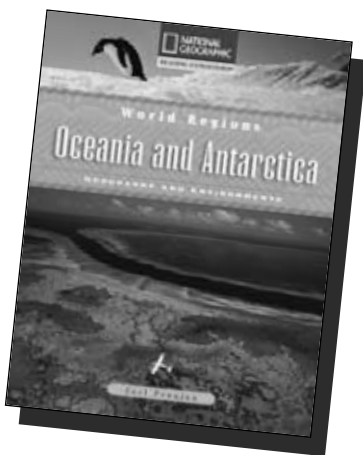
Oceania is a term used to describe several areas in the southern region of the world, including Australia, New Zealand, the Pacific Islands, and Antarctica. This book offers students the chance to explore a region of dramatic contrasts, from the tropical climate of the Pacific Islands to the frozen desert of Antarctica. Students will learn how people affect and are influenced by Australia's outback and Great Barrier Reef, New Zealand's remarkable volcanoes, the atolls of the Pacific Islands, and the hidden landforms of Antarctica. Throughout, students will learn how these areas were formed by Earth's forces, how each developed unique plant and animal life, and how humans and animals have adapted to the conditions of each place.

Background

Oceania encompasses two continents—those of Australia and Antarctica—as well as New Zealand and the Pacific Islands. Because it is composed of so many areas, Oceania reflects incredible diversity. Australia is the world's smallest continent. Most of its population is concentrated along the southeast coast, which receives relatively more rainfall than the rest of Australia. New Zealand has two main islands—North Island and South Island. North Island has the greater number of people. There are thousands of islands in the Pacific, ranging across a huge arc. Antarctica is actually composed of two parts—a group of islands in the west and a continental shield in the east—connected by a solid sheet of ice.

Oceania and Antarctica: Geography and Environments

By Carl Proujan



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 lakes
- Describe physical processes such as seasons, climate, and weather, 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

- Compare map scales

Supporting Skills

- Apply map scale keys
- Identify locations on a map
- Compute distances on a map

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 “How do we learn about faraway places?” Students might list reading books, magazines, newspapers, watching television, hearing stories from friends or teachers, travel, and so on.

Have students look at the map on page 6 and “explore” it. Have each student create a chart with names of two landforms from each region they’d like to learn more about. As they read, if a place they selected is discussed, have them add a fact about that place in the chart. If not, have them look up information about the remaining places to complete the chart.



Meeting Individual Needs

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

Chapter 1: Australia

Before Reading

Preview & Set Purpose

Have students look through the chapter, especially photographs and captions. Ask students what kind of plants and animals they see in the photographs. Ask:

Why do you think Australia’s animals are different from animals in our area?

To help students set a purpose for reading, have them refer to the chapter opener question on page 8 and keep this question in mind as they read.

Vocabulary Strategy: Use Specialized Words

Activity Master, page 66
Explain to students that some words are used to explain a specific topic. These specialized words can be grouped together because their meanings are related to maps. In the Activity Master,

students should write the correct definition for each word in the space provided. Then you may want to have students cut the table into individual squares. They can use these to work on vocabulary drills with a partner.

During Reading

Read Strategically: Use Outlines to Organize Ideas

Activity Master, page 67
Explain to students that outlines can help them organize ideas while they are reading, and also provide good study guides to help them remember the chapter. Have students complete the outline in the Activity Master as they read the chapter. Finished outlines do not need to be identical, but all should reflect the chapter content and organization.

After Reading

Respond

Initiate a class discussion to assess reading comprehension.

Correlation to National Standards

Writing/Communication Skills

- Find facts about a topic
- Conduct research
- Use prewriting
- Write persuasively
- Collaborate in creative process
- Review peer work
- Create and perform a skit

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

- People, Places, & Environments
- Production, Distribution, & Consumption
- Science, Technology, & Society
- Global Connections

Geography

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

Focus on Content Area Reading (continued)

Ask:

How would you contrast eastern Australia with western Australia? (See page 10.)

(compare and contrast)

Why are the plants and animals in Australia so different from those in other parts of the world? (See page 12.) **(summarize)**

How are coral reefs formed? (See page 15.) **(summarize)**

Why do you think many Aborigines now live in cities rather than in the outback? (See page 19.)

(make inferences)

Strategy Tip:

Make a local connection

Have students reread the *Issues and Challenges* feature about planting trees on page 14.

Have students use the Internet, write letters or make telephone calls to learn more about the National Arbor Day Foundation or another organization concerned with planting trees. Ask students to find out why these groups feel it is important to plant trees, and how the loss of trees affects the environment.

Writing: Write a Skit

Have students work in small groups to prepare a skit about living or traveling in Australia. Give them some ideas for characters, such as tour guide, scientist exploring the Great Barrier Reef, volunteer for OUCH, member of Royal Flying Doctors, person who lives in a large city, person

who lives in the outback, Aborigine, narrator. The skit should include facts about the region and maps.

Communicating: Presentation Skills

Have students perform their skits for each other, while the audience critiques each skit's content and performance. Students can then use the comments to improve their skits, add props and costumes, then practice and rehearse further. Consider creating a video, or have students perform for other classes, to educate others about how people live in Australia's regions and environments.

Chapter 2: New Zealand

Before Reading

Preview & Set Purpose

Give students a chance to look through the chapter, especially headings and subheadings. To help students set a purpose for reading, have them complete the K-W-L chart on page 109. Students can use chapter headings to help them. For example, the "K" column might include the statement, "New Zealand is two big islands." The corresponding "W" statement might say, "I want to know more about how New Zealand was formed." Have students return to the chart after reading the chapter to fill in the "L" column.

During Reading

Read Strategically:

Compare and Contrast

Graphic Organizer, page 108

Have students use the Venn Diagram Graphic Organizer to compare and contrast the North and South Islands of New Zealand. Encourage students to include facts about landforms and climate, and to use the Fact File on page 25 to add facts about population and area. Remind students that facts in common to both islands, such as "borders Cook Strait," should be written in the space where the circles overlap.

After Reading

Respond

Initiate a class discussion to assess reading comprehension.

Ask:

Describe the location of New Zealand and what landforms make up this country. (See pages 24–25.) **(summarize)**

What steps do you think could be taken to help protect the endangered animals of New Zealand? (See page 27.) **(make inferences)**

What are some positive effects of the volcanic eruptions on North Island? (See page 29.) **(cause and effect)**

What are some of the ways people of South Island make their living? (See pages 32–33.) **(summarize)**

Focus on Content Area Reading (continued)

Writing:

Write a Travel Brochure

Have students plan a ten-day trip to New Zealand. If possible, bring in several travel brochures, or use Web sites, for different parts of the world as models. Students can work individually or in groups to develop a brochure highlighting places to visit in New Zealand. Ask them to include facts about New Zealand's location, special landforms, and unique wildlife. Tours should include both North Island and South Island. Students may want to illustrate their brochures with pictures from magazines or Web sites.

Chapter 3: Pacific Islands

Before Reading

Preview & Set Purpose

Give students time to preview the chapter. Explain that in this chapter, students will learn more about the interesting way in which the Pacific Islands were formed and how they continue to change. Ask:

How do the Pacific Islands seem different from Australia and New Zealand? Predict what the answer to the opener question on page 34 might be.

What do you hope to learn by reading about the Pacific Islands?



Vocabulary Strategy:

Relate Words

Graphic Organizer, page 110

Explain to students that all of the vocabulary words they will be learning relate to the Pacific Islands, and several relate to their formation. Point out the words *reef*, *lagoon*, and *atoll* in the text on page 38, and then look at the way the words are used in the diagram on that page. Using the Graphic Organizer, have students define each word, using context, and then check their definitions.

During Reading

Read Strategically: Take Notes

As students read the chapter, have them take notes to help track and remember information. Students can turn the chapter title and subheads into questions and then read to answer the questions. Model a question to help students get started, such as "How are pearls developed in Polynesia?" Provide time for students to share their notes or to ask for help to answer their questions.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

What are the two kinds of Pacific Islands? How are they different? (See pages 36–38.) (compare and contrast)

How would you describe the climate of the Pacific Islands? (See page 39.) (summarize)

What do you think might be causing the death of the coral reefs of Rangiroa Atoll? (See page 43.) (draw conclusions)

Writing: Write a Paragraph

After students have finished reading the chapter, have them pick one topic, such as coral reefs, pearls, or climate and vegetation, and write a paragraph on that topic. Tell students that at first, they should close their books and try to write the paragraph based on what they remember from their reading. When that step is completed, students can go back to the chapter and correct, revise, or add details as necessary.

Communicating: Peer Review

When students' paragraphs are completed, have them get together in pairs. Students should exchange paragraphs with their partner. The "reviewer" should read the paragraph carefully and then talk to the writer about whether the paragraph clearly states a main idea, whether it supports the main idea with details, and whether it is easy to read. Give students a chance to revise their paragraphs based on the "reviewer's" comments.

Chapter 4: Antarctica

Before Reading

Preview & Set Purpose

Give students time to preview the chapter, paying special

Focus on Content Area Reading (continued)

attention to headings, maps, photographs, and graphics.

Ask:

What do the photographs tell you about Antarctica? What do you think it would be like to live there?

To help students set a purpose for reading, have them brainstorm ideas about the question on page 46: “What makes Antarctica so different from Earth’s other continents?” Ask students to predict some answers for this question. Then tell them that they will read the chapter to check their predictions.

Strategy Tip: Self-question

To help students monitor their own comprehension, encourage them to ask themselves questions about the topic they are reading. For example, they might ask:

How is Antarctica affected by the rest of the world?

What is the ozone layer?

When students cannot answer a question, encourage them first to reread the relevant section of the chapter. If they are still having difficulty, they can ask for clarification during the follow-up class discussion.

During Reading

Geography Strategy: Use Maps to Visualize

Have students reread page 54, and ask them what they think the super-continent of Gondwanaland would have

looked like. Photocopy the outline map of the world on page 111, and distribute copies to groups or pairs of students. Ask students to cut out the shape of each continent on the map, and then try to “fit” the pieces together like a puzzle. Have students compare their solutions. Follow up with research about how the scientists believe tectonic forces move continental plates.

Read Strategically: Identify Specific Concepts

Tell students that they will find out how Antarctica is a continent of extremes in this chapter. Explain that within the chapter, there are several examples of ways in which Antarctica is different from every other continent in the world. Ask students to find at least four differences as they read. Words like “most,” “only,” or “unique,” or words that end in “est” are good clues. Students might list southernmost continent, the only continent to touch Earth’s three largest oceans, coldest continent, driest continent, only continent not permanently inhabited by people, only continent set aside for scientific study, only continent on which no mammals make their permanent home.

After Reading

Respond

Initiate a class discussion to assess reading comprehension.

Ask:

What is unique about Antarctica’s relationship to the oceans? (See pages 48–49.)

(summarize)

What are some of the causes for Antarctica’s extreme cold? (See page 50.)

(cause and effect)

Why do you think that nations around the world thought it was important to set aside Antarctica for scientific study? (See page 52.)

(make inferences)

What are some of Antarctica’s major landforms underneath the ice? (See pages 54–55.)

(summarize)

What is one way in which human activities in other parts of the world affect Antarctica? (See pages 56–57.)

(cause and effect)

Writing: Research and Write a News Story

Activity Master, page 68

Have students complete the Activity Master as a prewriting exercise. Explain that when the Activity Master is finished, students should be ready to write an article about their topic. For this activity, students will need to collect two sources about one of these three topics: (1) the ozone layer; (2) changes in Antarctic icebergs; or (3) the lakes of Antarctica. These sources may include magazine and newspaper articles, entries from reference books, or information from credible sources on the Internet.

Extend and Assess

Focus on Geography

Think Geographically: **Compare Map Scales** Activity Master, page 69

Have students complete the Activity Master by comparing the maps of Easter Island and Viti Levu and answering the six questions. Students will find it easier to answer some of the questions if they have a ruler.

Assessment Options

Questions

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

- 1 How does the Great Dividing Range affect life in Australia?
- 2 Why does New Zealand have no native mammals except bats?
- 3 What is an atoll?
- 4 Why is Antarctica so dry although there is so much ice?
- 5 Discuss one challenge or threat to the environment in Oceania and what people are doing to try to help.

Assessment Activity

Have students prepare a chart to summarize Oceania's environments. The chart could have four rows—Australia, New Zealand, Pacific Islands, and Antarctica; and three columns—climate, land, and people, with information about each. Then have students write a paragraph in which they compare and contrast the four regions.

Charts and paragraphs should:

- ✓ Show a broad understanding of Oceania and Antarctica's environment.
- ✓ Show specific knowledge of the similarities and differences among the climates, lands, and peoples of the four geographical parts of this region.
- ✓ Be legible and be written in grammatical English.

Multiple-Choice Test

Use the multiple-choice test on page 101.

Cross-Curricular Connection

Science

In this book, students have read about unique and interesting wildlife, including moray eels, parrotfish, kiwis, kakapos, and others. Individually or in groups, have students choose one animal from this book and research it. Ask students to collect information about what type of animal species it is, what it eats, what its natural habitat is like, and any interesting facts about its anatomy, behavior, habitat, and so on. Have students also find pictures of the animal. Use www.nationalgeographic.com/wildworld for information, photos, and maps.

Home-School Connection

Students and parents can look for a video that features one or more of the regions of

Oceania at the library or video rental store. How does the information in the film compare to what they learned in *Oceania and Antarctica: Geography and Environments*?

Resources

Web Links

For more information on places in Australia, see www.cia.gov/cia/publications/factbook/geos/as.html and click on Geography.

For more information on Antarctica, see www.enchantedlearning.com/school/Antarctica/

Articles from *National Geographic*

“Australia: A Harsh Awakening [salinization]”: July 2000

“Kingdom of Coral: Australia's Great Barrier Reef”: January 2001

“Deep Mysteries of Kaikoura Canyon”: June 1998

“New Zealand: Preserving Pieces of a Fragile Biosphere”: October 2002

“French Polynesia: Charting a New Course”: June 1997

“Antarctica: Life at the Bottom of the World”: December 2001

Vocabulary: Use Specialized Words

The words below are from the chapter “Australia.” Each word has something to do with maps. In each box, write a meaning for the word. Include a sketch if you wish. Use the Glossary, a dictionary, and any other resource you might need to help you.

elevation**International Date Line****large-scale map****latitude****small-scale map**

Read Strategically: Use Outlines to Organize Ideas

An outline is a quick way to organize information from text and can also be a helpful study guide. In the outline below, some ideas about Australia are included to help you get started. Also, words in parentheses suggest what should be written in some spaces. Complete the outline as you read pages 8–15. Remember that Roman numerals **(I, II)** introduce a large heading or main idea of the chapter. The letters **(A, B)** give more information about the main idea. The Arabic numerals **(1, 2)** list more details.

I. The Land “Down Under”**A. A Varied Climate**

1. _____
2. _____

B. Unique Plants and Animals

1. _____
2. _____

II. The Coast**A. Great Dividing Range**

1. _____
2. _____

B. Pacific Ocean

1. _____
2. _____

C. Cities

1. _____
2. _____

III. Salty Lands**A. (Problem) _____**

1. _____
2. _____

B. (Solution) _____

1. _____
2. _____

Writing: Research and Write a News Story

You have been asked to write a news story about the ozone layer, icebergs, or lakes in Antarctica. In your story, use the information from Chapter 4 and two other sources, including newspaper or magazine articles, entries from reference books, or Web sites. Organize the information using the guide below to make writing your article easier.

- **First, define the topic:**

My topic is _____

- **Next, write two facts you already know about your topic from reading Chapter 4:**

Fact 1: _____

Fact 2: _____

- **Now, write the name of another source with useful information:**

Source: _____

- **Write two new facts about the ozone layer you have learned from this source.**

Fact 1: _____

Fact 2: _____

- **Repeat this process for your second source. If you collected more than two sources, use a separate sheet of paper for the names of sources and the facts.**

Source: _____

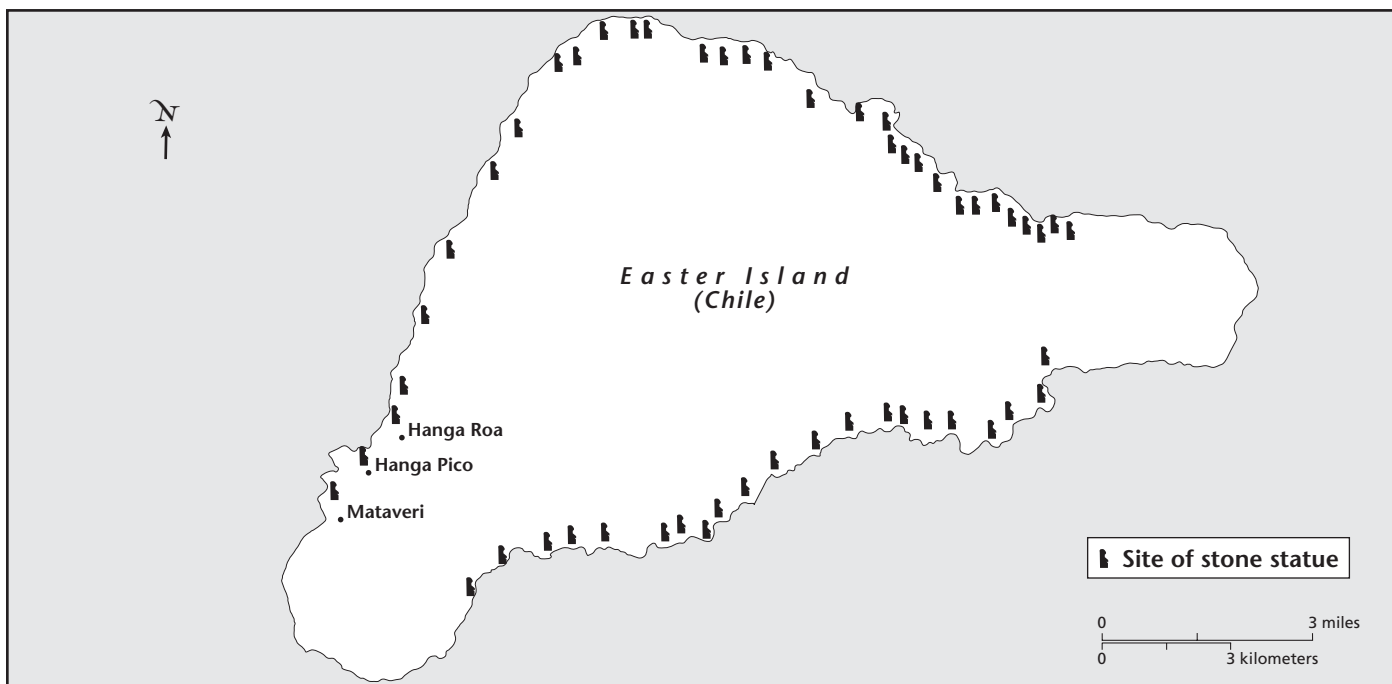
Fact 1: _____

Fact 2: _____

Now write your article on a separate sheet of paper. Use the facts you collected in your research. Make sure your article includes a headline and answers the questions *who? what? when? where?* and *why?*

Think Geographically: Compare Map Scales

The two maps on this page show two different islands in Oceania. Viti Levu is the “big island” of Fiji, and home to the country’s capital. Easter Island in the South Pacific is the site of ancient, mysterious stone statues. Examine the maps. Then complete the questions.



1. About how many miles across is Easter Island?

2. About how many miles across is Viti Levu?

3. How far would you need to travel to go from Nadi to Lautoka?

4. Which map would you use to find the distance from Mataveri to Hanga Pico? How far is it?

5. On which island would you find Suva? What can you tell about Suva from the map?



6. Which island is actually bigger? How can you tell?
