

Overview

Summary

In this book, students will learn about four geographic regions of Europe: the Alps, the North European Plain, the Mediterranean, and the Tundra and Taiga. Students will also learn about ways in which physical geography has influenced the history, culture, and daily life of people in the region. For example, students will read how the mountainous terrain of the Alps separated nations in the region. Each developed different languages and cultures. Conversely, students will also learn about ways in which human activities such as over-fishing in the Mediterranean have affected the natural environment. Readers will also find out about ways in which people of these regions are deliberately modifying the natural environment in order to make their way of life possible.

Background

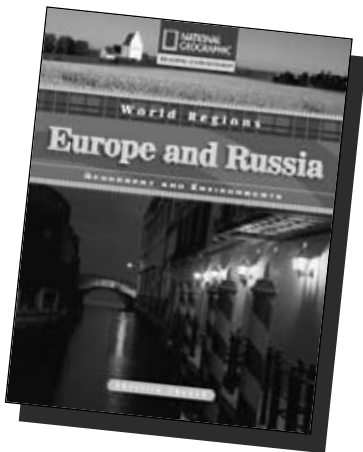
Europe and Russia are both part of Eurasia, the world's largest landmass.

Russia stretches from eastern Europe across all of northern Asia, and is the largest country in the world. It extends over 6.5 million square miles.

The east-west border between Europe and Asia is formed by the Ural Mountains, Ural River, and Caspian Sea. The Dardanelles, Sea of Marmora, Bosphorus Strait, Black Sea, and Caucasus Mountains create the north-south border. The majority of Russia's residents live on what geographers call the North European Plain, a flat region of forests and farmland on the west side of the Urals. That is one reason why geographers often associate Russia with Europe.

Europe and Russia: Geography and Environments

By Sherilin Chanek



Learning Objectives

Social Studies/Geography

- Examine the interactions of humans and their environments
- Interpret representations of Earth, such as maps and photographs
- Locate and describe landforms and features such as mountains, plateaus, rain forests, and deserts
- 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

Process Skills

Skill Focus

- Interpret city maps to analyze a region's geographical patterns

Supporting Skills

- Analyze
- Recognize cause and effect relationships

Reading Skills

- Draw conclusions
- Connect related concepts
- 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 if any of them has been to Europe. If so, students may want to bring in photographs from those trips. Students can also look through magazines and cut out photos of places in Europe. As they collect photographs, have students keep a list of all of the countries they identify as part of Europe. Initiate a class discussion in which students talk about ideas or phrases that come to mind regarding Europe. Tell students that in this book, they will learn about a continent of many contrasts, including tall peaks, sunny islands, large waterways, and below-freezing temperatures.



Meeting Individual Needs

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

Chapter 1: The Alps

Before Reading

Preview & Set Purpose

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

What kind of landforms and climate do you think you would find in the Alps?

Help students set a purpose for reading. Have students read the question on page 8 and brainstorm some possible answers. Then tell students that they will be reading to find out whether their answers are accurate. At the end of the chapter, return to the list and have students correct any untrue statements.



Vocabulary Strategy: Use Context Clues

Activity Master, page 46

Have students work alone or in pairs with the Activity Master. Students should read each sentence and try to figure

out the meaning of the word in italics. Then, using the Glossary, students can check and correct their answers.

During Reading

Read Strategically: Recognize Cause-and-Effect Relationships Graphic Organizer, page 107

Have students use the Cause-and-Effect Graphic Organizer to record three cause-and-effect relationships found in the chapter. Model one such relationship, using the reading on pages 8–10:

Cause: In the past it was difficult for people to cross the Alps.

Effect: Communities separated by the mountains developed different languages.

After Reading

Respond

Initiate a class discussion to assess reading comprehension.

Correlation to National Standards

Writing/Communication Skills

- Find facts about a topic
- Use prewriting
- Write persuasively
- Read an original story aloud to an audience

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

- Time, Continuity, & Change
- People, Places, & Environments
- Power, Authority, & Governance
- Production, Distribution, & Consumption
- Science, Technology, & Society

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)

Ask:

What are some ways that people have used to travel over, around, and through the Alps?

(See pages 18–19.) (retell)

Writing and Research:

Write a Description

The question on page 11 asks: “Where would you choose to build a home if you lived in the Alps?” Have students find facts about places in the Alps and use their own ideas in a short paper that answers this question. Have students create visuals of the home and its location to display with their writing.

Strategy Tip: Summarize

To show understanding of the effects of tourism on the Alps, have students summarize them in a short paragraph, organized by advantages and disadvantages.

Chapter 2: Northern Plains

Before Reading

Preview & Set Purpose

Have students look at the chapter, especially the diagram and accompanying captions on page 29. Ask:

What clues does the diagram give you about the North European Plain? How do you think people have used this land, past and present?

To help students set a purpose for reading, ask:

How do the people of the North European Plain work with, change, or control their natural environment?

Vocabulary Strategy:

Determine Word Knowledge

List vocabulary words from the chapter on the board. Ask students if they recognize any words, such as *canal*; any parts of words, such as *claim* from *reclaimed*; or any related words, such as *navigate* from *navigable*. Discuss students’ answers, and explain that prior knowledge can sometimes help students to learn and remember word meanings.

During Reading

Read Strategically: Draw Conclusions

Activity Master, page 47

Explain to students that as they read, they can draw conclusions. To do this, they use the information in the chapter and what they already know to make decisions. Have students complete the Activity Master to practice drawing conclusions and record information about the chapter.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

Why do you think the western part of the plains gets more rainfall than the eastern part?
(See pages 24–25.)

(draw conclusions)

What factors can cause floods on the North European Plain?
(See page 31.)

(cause and effect)

Writing and Research:

Write a Position Paper

Have students reread “Is it worth it to build a river?” on page 32. Tell students to imagine that they live in a city where they must decide whether or not to allow a new canal to be built. Have students write a short paper in which they take a position on this issue and explain their reasoning. Students may use the effects of the Main-Danube Canal, as explained in the chapter, to support their position.

Communicating: Persuasion

After students have completed their position papers, ask those who supported the canal to sit on one side of the room, and those who opposed it to sit on the other. Ask for volunteers from each side of the room to read their papers. Tell students that if their minds change after listening, they can move to the other side of the room. After the activity, discuss how each side was presented.

Students reading aloud should

- ✓ Speak clearly at an appropriate speed and volume.
- ✓ Make eye contact with listeners.
- ✓ Make main idea clear and support with reasons.

Focus on Content Area Reading (continued)

- ✓ Be prepared to answer questions and, if necessary, explain further without reading.

Listeners should

- ✓ Identify the main idea.
- ✓ Ask questions when the presentation is finished.
- ✓ Be able to state and support their own ideas on the subject.
- ✓ Listen politely.
- ✓ Participate in the discussion of the presentations.

Chapter 3: The Mediterranean Region

Before Reading

Preview & Set Purpose

Have students apply prior knowledge by putting the word *Mediterranean* on the board and asking students what ideas or associations they have with that word. List students' responses on the board. Then give students time to preview the chapter. Ask:

What are two important Mediterranean industries?

To help students set a purpose for reading, have them use the K-W-L Graphic Organizer on page 109. Ask students what they know about the Mediterranean and what they want to know. Model a statement such as *I want to know how the city of Venice was built*. At the conclusion of the chapter, have students finish

the chart by filling in what they have learned.

Vocabulary Strategy:

Use Word Parts

Have students preview the chapter's vocabulary words. Then explain that knowing the meaning of certain word parts can help in figuring out words' definitions. Write *aque/aqua* on the board and have students use the dictionary to determine the meaning of the word part. Ask students if they can now try to develop definitions for *aqueduct* and *aquaculture*. Then write *eco* on the board and use the same process for *ecotourism*. Finally, have students write all of the chapter's words in their notebooks and use the chapter, glossary, and/or dictionary to write definitions.

During Reading

Read Strategically:

Use Concept Webs

Have students draw concept webs in their notebooks to help them organize ideas from the chapter. Explain to students that the circle in the center should say "Mediterranean Region." Then suggest to students that the other circles in the web might relate to landforms, climate, industry, or major cities. Have students compare and discuss their finished concept webs.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

What are the three main peninsulas of southern Europe? (See page 38.) **(retell)**

How might the farmers of the Mediterranean solve the problem of the loss of topsoil? (See page 41.) **(draw conclusions)**

Prewriting: Write a Story

Activity Master, page 48

Explain to students that prewriting, or organizing your ideas, helps you plan your writing project. Have students complete the Activity Master as a prewriting exercise. After answering each question, students should be ready to write. Each student's story should contain at least three details that will educate the reader about the challenges people face in the Mediterranean Region.

Possible scenarios:

- You are part of a fishing family from Folegandros, worried about the changes to your way of life.
- You are part of an olive-growing family in southern Spain, trying to raise a good crop and also protect the land.
- You are a city planner in Venice and you have been asked to help stop the city from sinking.

Focus on Content Area Reading (continued)

Communicating: Speaking/Listening

Consider having students find photos or create illustrations, then compile stories into a magazine or display to present to the class.

Students reading aloud should

- ✓ Speak clearly at an appropriate speed and volume.
- ✓ Make eye contact with listeners.
- ✓ Make story clear and support with details.
- ✓ Be prepared to answer questions.

Students listening should

- ✓ Identify the main idea.
- ✓ Ask questions when the presentation is finished.
- ✓ Listen politely.

Chapter 4: Tundra and Taiga

Before Reading

Preview & Set Purpose

Give students time to preview the chapter, paying special attention to headings, maps, photographs, and graphics.

Ask:

How do you think this region is different from the other three regions in this book?

Help students set a purpose for reading. Ask:

What do you want to find out as you read? How might learning about tundra and taiga be valuable?



Vocabulary Strategy:

Use Graphic Organizers Graphic Organizer, page 110

Have students use the Vocabulary Study Graphic Organizer to record definitions for each vocabulary word in the chapter and to use each word in a sentence.

Geography Strategy:

Latitude and Longitude

Have students use the Outline Map on page 115 to draw the location of the Trans-Siberian Railroad. Have students label some of the major cities along the route and research their populations. Have students write a paragraph about why large cities and small cities have grown along the railroad. They can also use what they have learned from the chapter in their explanations.

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 question. Sample questions: *What is challenging about the tundra's climate? How do animals and people adapt to the cold?* Provide time for students to share their notes or to ask for help in answering the questions they write.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

Why do you think it is important for the Arctic fox to blend in with the white snow? (See page 51.)

(make inferences)

What are some of the challenges to mining Siberia's natural resources? (See page 56.)

(summarize)

Why do you think many people come to work in Siberia but do not bring their families with them? (See page 57.)

(make inferences)

Writing:

Write a Magazine Article

Tell students to imagine that they have been assigned to write a short article for a children's magazine about either the tundra or the taiga. Using the chapter they should describe the area, and describe what life may be like for people who live there. Each article should have a headline.

Extend and Assess

Focus on Geography

Think Geographically: Read a City Map

Activity Master, page 49

Have students use the Activity Master to practice skills in reading and drawing conclusions from street maps. Have students work in pairs, each answering the questions independently and then checking each other's answers.

Assessment Options

Questions

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

- 1 How have the Alps affected the development of nations in the region?
- 2 What effect has the physical geography of the Northern Plains had on that region's history?
- 3 In which of the four regions in Europe that you studied would you find peninsulas?
- 4 How does the raising of olives in the Mediterranean affect the land there?
- 5 What are some ways that animals and people have adapted to life in the tundra?

Assessment Activity

Using diagrams, words, and photographs clipped from magazines and newspapers, have students create posters that represent one of the following concepts from *Europe and Russia: Geography and Environments*:

- Human activities are changing the boreal forest.
- People living in the Netherlands work hard to reclaim land from the sea.
- Years of farming and fishing have altered the environment and wildlife in the Mediterranean.
- Physical geography has affected history and culture in Europe.

Posters should

- ✓ Clearly address one concept.
- ✓ Use both words and images to communicate ideas.
- ✓ Indicate what region(s) the issue affects.
- ✓ Be well organized and carefully prepared.

Multiple-Choice Test

Use the multiple-choice test on page 99.

Cross-Curricular Connection

Science

Have students reread the Global Connections feature on page 43 and then do research on global warming. Students may use magazine and newspaper articles, books, the Internet, and other sources to find out what scientists believe to be the causes, short-term effects, and long-term effects of global warming.

Home-School Connection

Have students interview and look through photos with a family friend or relative who

has traveled to Europe. Or have students plan with their parents a one-week trip to Europe. Would they choose to travel to all four regions, or try to see and do a lot in one region during that week?

Resources

Web Links

A variety of lessons and activities are available on-line from www.nationalgeographic.com/xpeditions by using the Search button.

To learn more about how islands are formed, enter "To Build an Island." To learn more about clean water, enter "Can We Keep the Lake Clean?"

For photographs of Venice, students may want to explore www.nationalgeographic.com/photography/galleries/venice/index.html

Articles from *National Geographic*

"The Iceman: Lone Voyager from the Copper Age": June 1993

"Main-Danube Canal: Linking Europe's Waterways": August 1992

"Olive Oil: Elixir of the Gods": September 1999

"A Russian Voyage from the White to the Black Sea": June 1994

"Russia's Lake Baikal—The World's Great Lake": June 1992

Vocabulary: Use Context Clues

You can use context, the words that are around a word, to figure out the meaning of an unfamiliar word. Read the sentences. Circle the words in each sentence that help you figure out the meaning of the word in italics. Write what you think the word means. Then look up the word in the glossary or a dictionary and see how closely its meaning matches the meaning you wrote from context.

1. The ski cabin's *elevation* was so high that I could barely see people at the foot of the mountain.

Meaning from context: _____

Meaning from glossary: _____

2. The *hydroelectricity* produced by water falling over the dam provided power for the city.

Meaning from context: _____

Meaning from glossary: _____

3. There are now more trees in some areas of the world than 100 years ago, thanks to *reforesting*.

Meaning from context: _____

Meaning from glossary: _____

4. The *avalanche* moved so fast down the mountain that its snow mass quickly buried the climbers.

Meaning from context: _____

Meaning from glossary: _____

5. An important feature of the *terrain* in Central Europe is mountains.

Meaning from context: _____

Meaning from glossary: _____

6. The road had been so worn down by *erosion* that deep ruts now scarred its once-smooth surface.

Meaning from context: _____

Meaning from glossary: _____

Read Strategically: Draw Conclusions

Read each of the following statements from the “Northern Plains” chapter. Which of the two sentences following it is a reasonable conclusion? Circle the best conclusion after each statement. Remember that when you draw a conclusion, you make a decision about meaning based on the information you are given and what you already know.

Statement: Most capital cities in Europe are located on rivers.

Conclusion 1: All Europeans are good at fishing.

Conclusion 2: Rivers provide water, good soil, and transportation.

Statement: Much of the land in the Netherlands lies below sea level.

Conclusion 1: The Dutch people must work hard to reclaim land from the sea.

Conclusion 2: The capitol building of the Netherlands is partially underwater.

Statement: Instead of building the shortest route, canal builders made the canal wind like a river, blending with the valley.

Conclusion 1: The canal builders hoped no one would notice that they had built a canal.

Conclusion 2: The canal builders wanted to preserve the landscape as much as possible.

Now use your skill at drawing conclusions to write answers to the following questions.

1. Why would countries in the Northern Plains be easier to invade than those in the Alps?

2. How might the network of rivers in the Northern Plains have influenced communities that grew up in that region?

3. Why have the people of the Northern Plains made many changes to the natural environment?

Prewriting: Write a Story

Before you begin a writing project, it is often useful to think through your ideas and take some notes. That way, you are less likely to get stuck in the middle. Use the questions below to help you plan your story about the Mediterranean Region. Remember to think through how each answer will affect your story, and to include at least three details about the Mediterranean in the finished work. When you have completed this sheet, you are ready to write your story on a separate sheet of paper.

1. Who is the main character? What is his/her name? Age? What does he/she do for a living?

2. Who are the other characters in the story? How do they relate to the main character?

3. What is the time period for the story?

4. How is the Mediterranean important to the story? Do the characters live there? Are they visitors?

5. What is the problem that the main character will face?

6. How will he or she solve the problem?

7. How will the story end?

8. What are the three details about the Mediterranean that the story will include?

a. _____

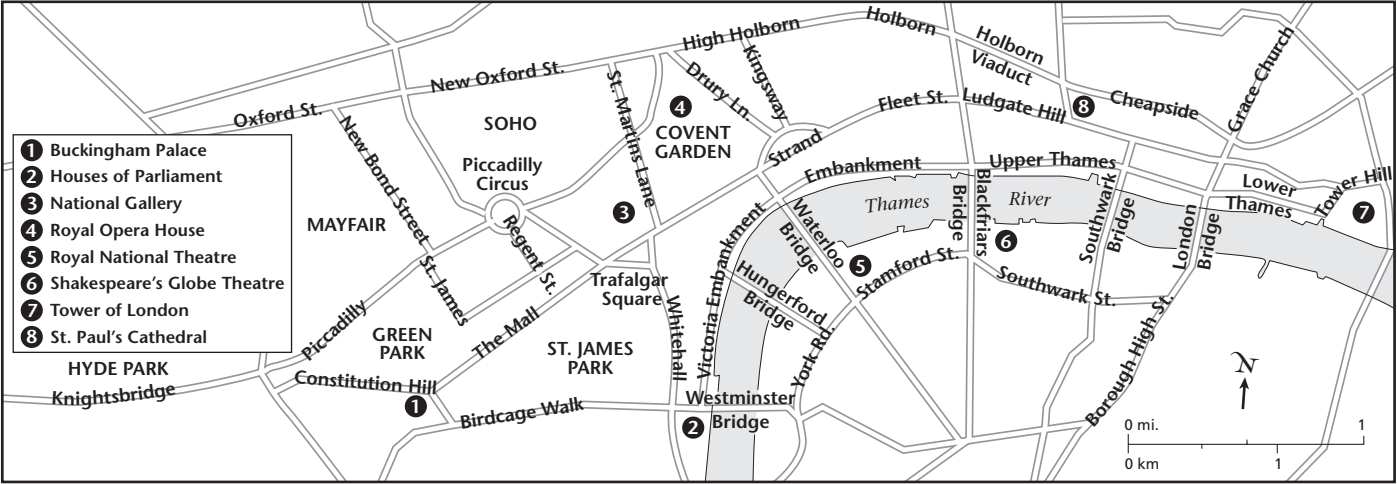
b. _____

c. _____

Name _____

Think Geographically: Read a City Map

The map on this page shows central London. Spend some time familiarizing yourself with the map, the names of the streets, and the interesting places to visit. Then use the map to answer the questions below.



1. What river flows through the city of London? _____

2. How many labeled bridges over this river are shown on the map? _____

3. Why do you think there are multiple bridges across the river instead of just one?

4. The Houses of Parliament are home to Britain's legislature. If you visited there, and then wanted to see some art at the National Gallery, in what direction would you walk? What streets would you take?
