

Overview

Summary

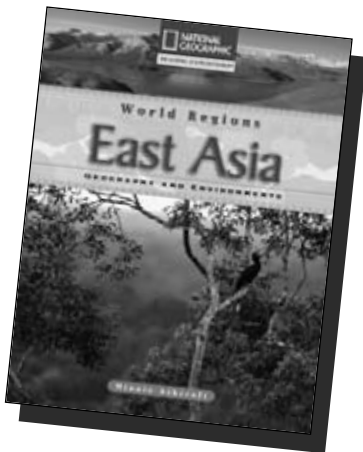
Physical geography heavily influences the region of East Asia. In this book, students will learn about ways in which people adapt to living in extreme environments, such as the “Ring of Fire” in the Pacific islands and some of the world’s coldest deserts in China and Mongolia. Students will also read about how humans are changing natural environments in order to meet changing ways of life, as is shown by the project of the Three Gorges Dam on the Yangtze, Asia’s longest river. Students will also learn about those who are trying to protect the land and wildlife from destruction by initiating projects like the Chang Tang Nature Reserve in the Chinese desert and the Northern Sierra Madre Wilderness Park in the rain forests of the Philippines.

Background

Asia is the largest continent on Earth, and it is one of great geographical diversity, spanning latitudes from the Arctic to near the Equator. The Asian continent accounts for almost one third of the total land area in the world. East Asia refers to the eastern portion of Asia’s mainland, including China, and the peninsulas of Korea and Southeast Asia, as well as the islands in the Pacific, including Japan, Indonesia, and the Philippines. Much of East Asia is covered by rocky mountains and cold deserts, which means that most of the population clusters near the coast or along the region’s great rivers, the Yangtze, Huang, and Mekong.

East Asia: Geography and Environments

By Minnie Ashcroft



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 plateaus, mountains, 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 and endangered species

Process Skills

Skill Focus

- Interpret tables to analyze a region’s geographic patterns

Supporting Skills

- Compare and contrast
- 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

Activate Prior Knowledge

Tell students that East Asia is a region of great geographical diversity. Break the class into four groups, giving each a chapter topic: islands, deserts, rivers, and rain forests. Have each group list what they know already about their topic on one side of the paper. On the other side, have them create a list of questions they would like to answer about that topic. Have each group select their top three facts and questions to present to the whole class.



Meeting Individual Needs

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

Chapter 1: Islands and Archipelagos

Before Reading

Preview & Set Purpose

Ask students if they have ever heard about or seen pictures of an earthquake or a volcano. Give students a chance to look through the chapter. Tell students that they are about to read about an area known as “The Ring of Fire.” Ask students what images this phrase brings to their minds.

Help students set a purpose for reading. Ask:

What do you expect to learn from this chapter? From your lists of questions, which do you think this book might help you answer?



Vocabulary Strategy: Use Specialized Words

Activity Master, page 26

Explain to students that it is sometimes easier to learn and remember specialized words if you learn them in groups,

so you can see how they relate to each other. Have students complete the Activity Master to learn connections among terms related to volcanoes.

During Reading

Read Strategically:

Use Flow Charts

Graphic Organizer, page 105

Have students use the Flow Chart to break down the events that lead to and culminate in the formation of a volcano.

Help them find a statement for the first box, such as: *Tectonic plates push against each other.*

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

What are two factors that affect the climate of the islands of East Asia? (See page 10.)
(cause and effect)

What causes volcanoes to erupt? (See pages 12–13.)
(summarize)

Correlation to National Standards

Writing/Communication Skills

- Find facts about a topic
- Conduct research
- Prepare notes before speaking
- Use writing to aid others' understanding of concepts
- Give an oral 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

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)

What do earthquakes and tsunamis have in common? How are they different?
(See pages 16–19.)

(compare and contrast)

How would an earthquake that measures 3 on the Richter scale compare to an earthquake that measures 5? (See page 17.)

(make inferences/compare and contrast)

What new technologies are Japanese scientists working on to help deal with earthquakes?
(See page 21.) **(summarize)**

Writing:

Write a Research Report

Have students consult outside reference sources and work individually or in small groups to research and write a report about a famous earthquake or volcanic eruption. Reports might include the date of the earthquake or the volcano's last eruption, where the earthquake or eruption took place, and what the effects of the event were.

Communicating:

Speaking/Listening

Students may work in small groups to present the information they have gathered in a “news brief.” If reports were completed in groups, each group should choose one volcano or earthquake as the subject of the news brief. Students should decide how to divide the responsibilities. Students may use visual aids to help enrich the news brief.

Students presenting should:

- ✓ Be prepared with notes and visual aids, as appropriate.
- ✓ Speak clearly at an appropriate speed and volume.
- ✓ Make eye contact with listeners.
- ✓ Make main idea clear and support with reasons.
- ✓ Be prepared to answer questions.

Students in the audience should

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

Chapter 2: Interior Deserts

Before Reading

Preview & Set Purpose

Have students read the first sentence on page 22. Have students look back at questions they listed about deserts, or have them brainstorm their knowledge of the topic in a concept web on the board. Then give students a chance to look through the chapter, especially the headings and visuals. Ask:

What do you expect to learn about both deserts and East Asia that you don't already know?

What does the heading on page 30 tell you about the vegetation in the Chang Tang desert? Is this different than what you expected?

What does the illustration on page 35 show? Why do you

think these creatures might be included in this chapter?


Help students set a purpose for reading. Ask students to find one heading in the chapter and turn it into a question that they will read to answer. Model a question using the heading on page 29:

How are people's ways of life changing in the interior deserts?

Vocabulary Strategy: Analyze Concept Words

Have students create a concept map with four squares—definition, essential characteristics, examples, and non-examples—to expand their knowledge about one of the chapter's main concepts by categorizing and analyzing words associated with the concept.

During Reading

 **Read Strategically: Identify Main Ideas and Details**
Activity Master, page 27

Have students use the Activity Master as a study guide to help them identify main ideas and supporting details of the chapter. Remind students that to find main ideas, they should ask themselves what a section is mostly about.

Strategy Tip: Use diagrams

Explain that a diagram uses pictures, symbols, and labels to describe a process. For example, a diagram to illustrate how the rain shadow affects the climate of the Chang Tang

Focus on Content Area Reading (continued)

might be titled “Effect of the Rain Shadow on the Chang Tang.” Labels would mark the Himalaya, Chang Tang, and the rain falling on the other side of the rain shadow.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

Why is the Plateau of Tibet sometimes called the “Roof of the World”? (See page 24.)

(summarize)

Why is it important to protect the wildlife in the Chang Tang Nature Reserve? (See pages 26–27.) **(draw conclusions)**

What are the points of view of the Tibetan nomads and the conservationists about fencing in parts of the Chang Tang region? (See pages 28–31.)

(fact and opinion)

What effects might the oil in the Taklimakan desert have on China’s economy?

(See page 33.)

(cause and effect)

Writing: Write a Journal Entry

Students can choose one of the three deserts they have read about and imagine that they are traveling there. Students can write a journal entry describing what that desert is like. Entries may include facts about climate, location, wildlife, natural resources, or other details.

Chapter 3: Mighty Rivers

Before Reading

Preview & Set Purpose

Have students preview the chapter, especially headings, photographs, maps, and diagrams. Ask:

*Which region do you think the region of mighty rivers will have more in common with—*islands and archipelagos or interior deserts? Why?**

To help students set a purpose for reading, ask:

What might be the benefits and the problems of living by a great river?

Geography Strategy:

Use Maps to Visualize

Using the chapter maps and the Outline Map on page 113, have students trace the paths of the three major rivers of East Asia: Yangtze, Huang, and Mekong. Where does each river begin and end? Label the landforms at the beginning of each river and the bodies of water where they empty. Students’ maps should include title, compass rose, and key.

During Reading

Read Strategically: Use Images to Reinforce Comprehension

After students have read the chapter, have them choose three graphics from the chapter. For each, have students explain how the graphic relates to the text in the chapter. Model this example, using the bar graph on page 42:

This graph shows which countries in the world produce the most rice. Rice is an important food in East Asia.

Strategy Tip: Use illustrations to aid comprehension

If students have difficulty understanding the selection, encourage them to refer to the images in the book as they read, asking themselves how the illustrations help explain the text.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

Why has the use of the Grand Canal changed over time?

(See page 40.) **(summarize)**

What problems are caused by the Yangtze River?

(See page 43.)

(cause and effect)

Writing: Prepare Notes for a Speech

Activity Master, page 28

Have students prepare a speech based on one of the scenarios listed on page 24. Explain to students the importance of preparing notes for the speech so that they know what they are going to say. Have students complete the Activity Master. When they are ready, students should practice their speeches several times to themselves, and then pair up and practice before a partner.

Focus on Content Area Reading (continued)

Scenarios:

- You are a tour guide along the Yangtze River. Make a welcoming speech to your newest group of tourists, telling them about the region.
- The Three Gorges Dam is completed, and you have been chosen to make the official opening speech. Talk about what the dam is and how it will help China.

Communicating: Speaking/Listening

After students have prepared and practiced with a partner, have them present their final speeches for the whole class or to small groups.

Chapter 4: Rain Forest

Before Reading

Preview & Set Purpose

Ask students what they have read or seen on television about rain forests. Give students time to preview the chapter, paying special attention to headings, maps, photographs, and graphics. Ask:

In the photograph on page 50, how do the trees look different from those you see in your community? What is the “Wild Weather” feature on page 52 about? What do you already know about hurricanes or typhoons? Can you predict what the word “hotspot” in the heading on page 54 might refer to?

Have students state a purpose for reading based on something they previewed in the chapter, such as, *I want to learn more about the animals that live in the rain forests of East Asia.*

Vocabulary Strategy: Determine Word Knowledge

List the vocabulary words from the chapter on the board and ask students what they already know about any of these words. Write students’ responses next to the list. Then have students use the chapter, glossary, and/or dictionary to check their meanings and write correct definitions in their notebooks.

During Reading

Read Strategically: Compare and Contrast

Graphic Organizer, page 108

Have students use the Venn Diagram Graphic Organizer to compare and contrast rain forests and coral reefs in East Asia. Remind students that facts in common to both environments, such as “endangered by human activity,” should be written in the space where the circles overlap.

After Reading

Respond

Initiate a class discussion to assess reading comprehension. Ask:

What do lowland rain forests and montane rain forests have in common? What are some differences? (See pages 50–51.)

(compare and contrast)

Describe what it would be like to be caught in a typhoon. (See page 52.) **(summarize)**

Why do you suppose some scientists think there is still time to save the environment in the Philippines? (See page 55.) **(make inferences)**

What are some reasons that coral in the Philippines is endangered? (See page 57.) **(cause and effect)**

Writing: Create a Picture Book

Tell students that they are about to become authors and teachers. Working individually or in small groups, students can create picture books, designed for readers much younger than themselves, about the rain forests in East Asia. Remind students that they do not need more than one or two sentences per page, but that the sentences must clearly state a main idea.

You may choose to review a rough draft of the text before students finalize the project.

For the final projects, students can paste pictures clipped from magazines or newspapers, or draw their own pictures, onto construction paper and write the text alongside the appropriate pictures. Books should be at least 6–8 pages, and should have a title and cover.

Extend and Assess

Focus on Geography



Think Geographically: Track Earthquakes

Activity Master, page 29

Have students use the Activity Master to practice skills in reading maps and tables. You may have students work in pairs, with one student reading the table while the other marks the coordinates on the map.

Assessment Options

Questions

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

- 1 What are two points of view about fences in the grasslands of the Chang Tang?
- 2 Why are conservationists concerned about the threats to the coral reefs in the Philippines?
- 3 What is the Ring of Fire, and how did it get its name?
- 4 What are some challenges of living beside the Yangtze River?
- 5 What are some causes of deforestation in the Philippine rain forest?

Assessment Activity

Have students write captions and draw illustrations for at least four of the regions described in their book. Each caption should describe interactions between humans and their physical environments. Using the outline map of East Asia on page 113, have students paste

their pictures around the map and draw a line to the region or place where an example of the interaction is found.

Illustrations should:

- ✓ Include at least four examples with matching text and images.
- ✓ Be accurate and neat; Be keyed to appropriate place on map.
- ✓ Use correct grammar and mechanics.

Multiple-Choice Test

Use the multiple-choice test on page 97.

Cross-Curricular Connection

Science

Note that examples of several kinds of careers in science are found in this chapter. Have students do research in the library or on the Internet to find out about *biologists* (page 26), *seismologists* (page 17), people who search for oil (page 33), and people who study fossils (page 34).

Student research may be written up and combined in a class book called *Some Careers in Science*.

Home-School Connection

Students can look with parents for videos, newspaper articles, magazine articles, or Web sites that relate to earthquakes, volcanoes, tsunamis, rain forests, or coral reefs. Students can explain how the information in the article

relates to what they have read in *East Asia: Geography and Environments*.

Resources

Web Links

For a general introduction to earthquakes, volcanoes, and tsunamis, with animation, students may go to www.pbs.org and enter the search term “savage earth.”

Students may learn more about the controversy surrounding the construction of the world’s largest dam in China by entering “Three Gorges Dam” as a search term on the Web site www.pbs.org

Articles from *National Geographic*

“Kobe Wakes to a Nightmare”: July 1995

“Tibet’s Remote Chang Tang: In a High and Sacred Realm”: August 1993

“Dinosaurs of the Gobi”: July 1996

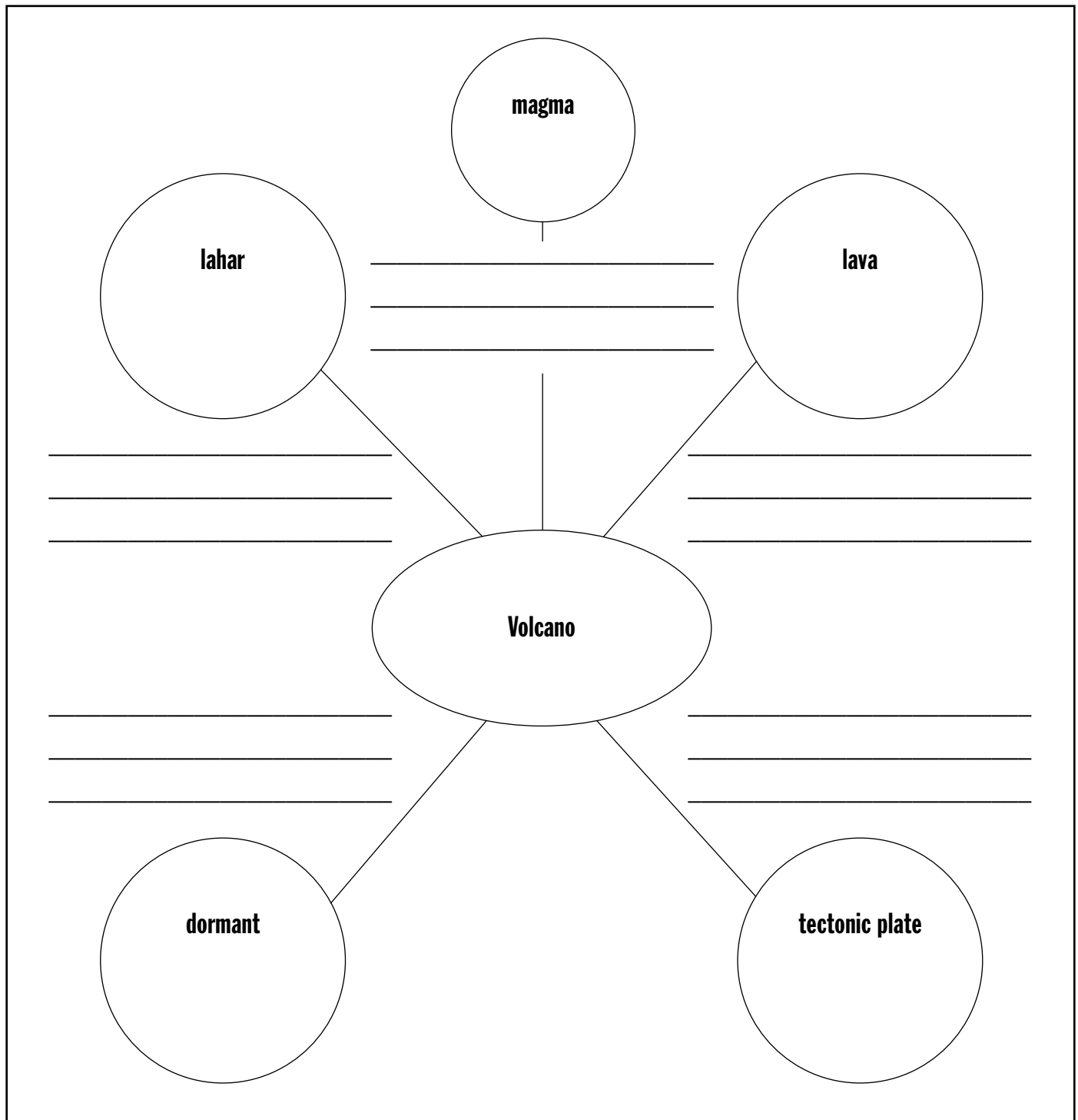
“Xinjiang”: March 1996

“China’s Three Gorges: Before the Flood”: September 1997

“The Philippines”: July 2002

Vocabulary: Use Specialized Words

It is often easier to remember the meanings of specialized words if you think about how they are related to each other and to the larger topic they describe. The words below are from the section on volcanoes. Each word or phrase is related to volcanoes. In the circles, write a meaning for each word. On the lines, write a sentence that shows how the word relates to volcanoes.



Read Strategically: Identify Main Ideas and Details

As you read the chapter “Interior Deserts,” keep in mind that the main idea of each section is what that section is mostly about. Heads and subheads can be useful in finding the main idea of a section. Details are facts and examples that explain the main idea. Finish the chart with the missing details and main ideas.

The Chang Tang Desert *Main Idea:* The Chang Tang is a high, cold desert located atop the Plateau of Tibet.

Details

- 1.
- 2.
- 3.
- 4.

The Taklimakan Desert *Main Idea:* The Taklimakan, in western China, is one of the driest deserts in the world.

Details

- 1.
- 2.
- 3.
- 4.

The Gobi Desert *Main Idea:*

Details

- 1.
- 2.
- 3.
- 4.

Writing: Prepare Notes for a Speech

It is helpful to prepare carefully when you have to make a speech. Make notes on cards to use while speaking. Think about what you want to say. What is your main idea? What details will you use to support it? What is the order in which your facts should be presented? Use this sheet to help prepare for a speech to your class. When you have finished, you can cut out each box and tape it to an index card. Then bring the cards in the proper order to your presentation.

1. Greeting or welcome

5. Third important detail

2. Main idea

6. Fourth important detail

3. First important detail

7. Conclusion or summary (restate your main idea in different words)

4. Second important detail

8. Goodbye or thank you

Name _____

Think Geographically: Track Earthquakes

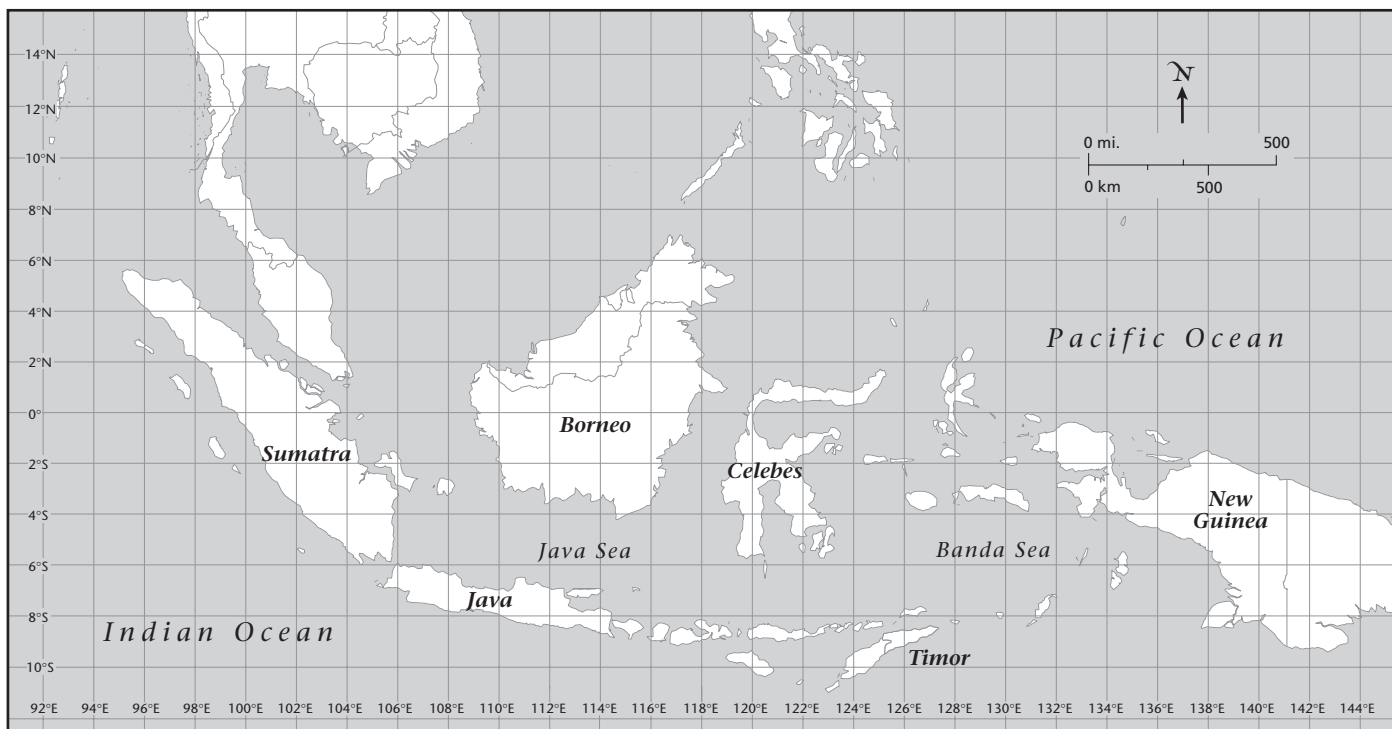
The chart below lists information about earthquakes in Indonesia in the year 2000. Use the latitude and longitude coordinates to mark each earthquake on the map. When you have finished, answer the questions below.

Earthquakes in Indonesia, 2000

Year	Date	Approximate Latitude	Approximate Longitude	Magnitude
2000	May 4	1°S	123°E	7.3
2000	June 4	5°S	102°E	7.9
2000	June 7	5°S	102°E	unrecorded
2000	July 12	7°S	107°E	5.1
2000	Oct. 25	7°S	106°E	6.5

Source: U.S. Geological Survey

Major Islands of Indonesia



1. During which month in 2000 did the most earthquakes occur?

2. On which island did the weakest earthquake occur in 2000?

3. Near which island did the strongest earthquake occur in 2000?
