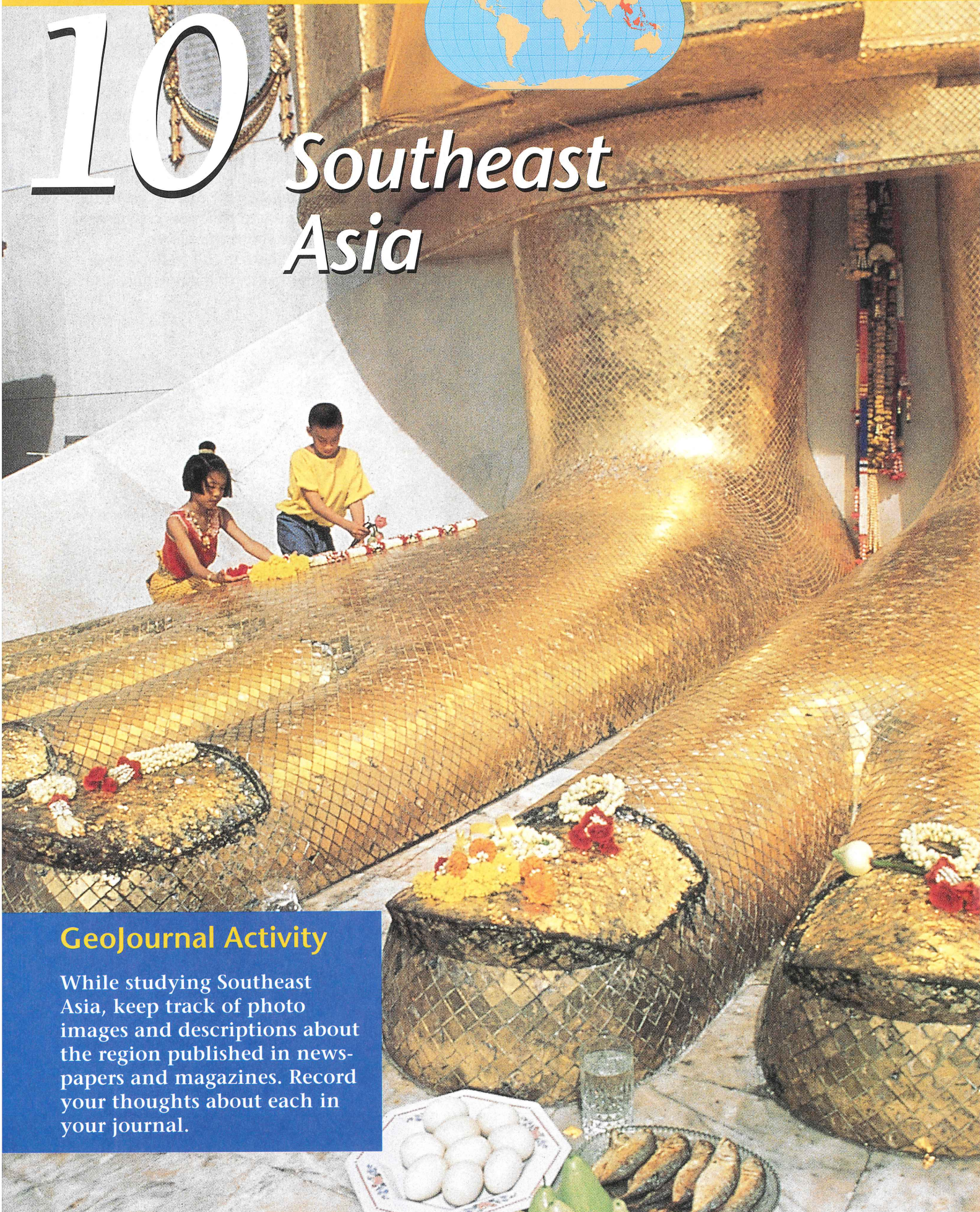


UNIT



10 Southeast Asia

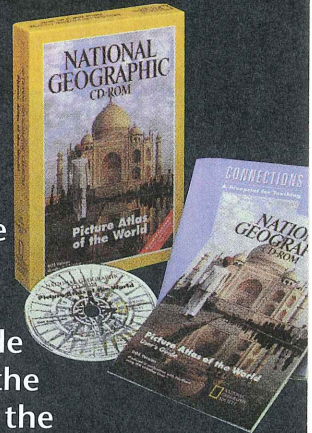


GeoJournal Activity

While studying Southeast Asia, keep track of photo images and descriptions about the region published in newspapers and magazines. Record your thoughts about each in your journal.

Picture Atlas of the World CD-ROM

Rivers are very important for communication and transportation in Southeast Asia. Create a file of photographs showing life along these rivers. (See the *Picture Atlas of the World User's Guide* on how to use the Collector button.) Include the following photographs: the Irrawaddy River in Myanmar; the houses on a canal in Bangkok and the barges on the Chao Phraya River in Thailand; gold panning in Laos; and the Mekong River in Cambodia. Get together in groups. Use the information in the photo captions in your file and other sources to write questions about the rivers that will challenge your other classmates.



interNET CONNECTION

For more information about Southeast Asia visit the National Geographic Society's Web site.

www.nationalgeographic.com

For a unit-based activity visit the Glencoe Social Studies Web site.

www.glencoe.com



These huge golden toes belong to a tall statue of the Buddha in Bangkok, Thailand.

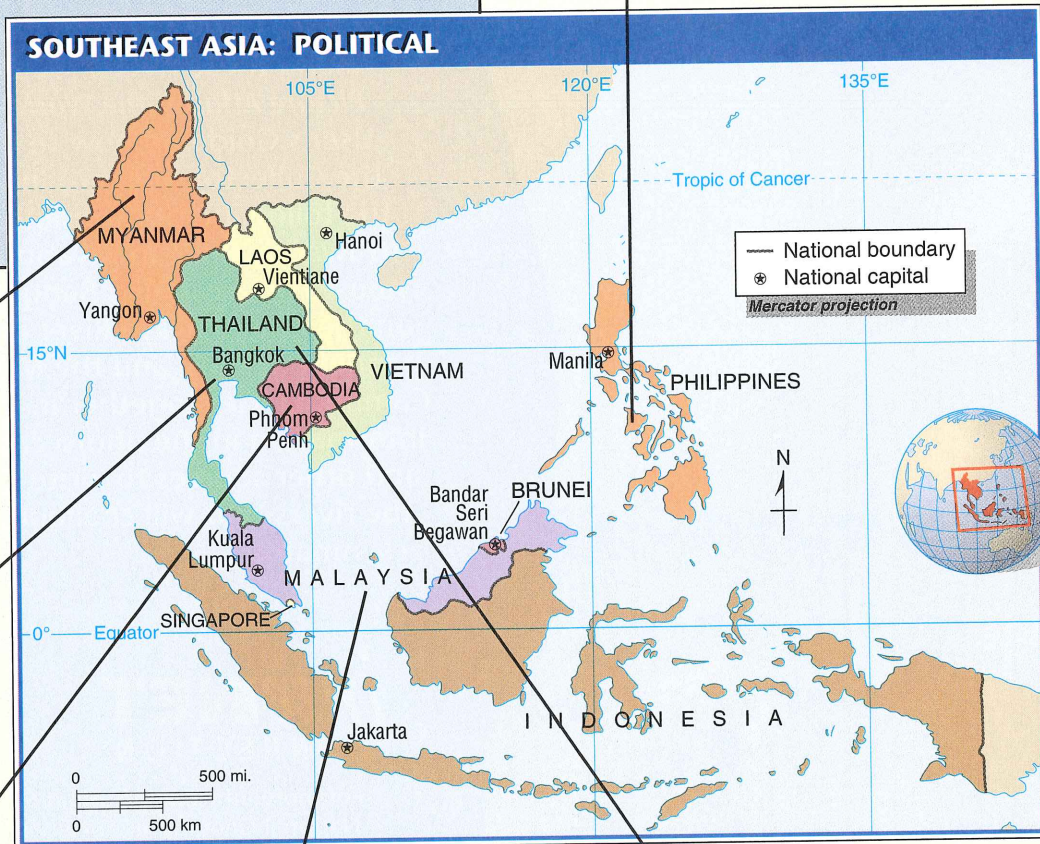
◀ These youths in Rangoon, Myanmar, brave the water fights that mark the advent of the monsoon season.

Cultural Geography

EXPLORING CULTURAL DIVERSITY

1. What areas of Southeast Asia are the most heavily populated? Most sparsely populated?
2. What nations make up Southeast Asia?
3. What cities in Southeast Asia have more than 2 million people?
4. What countries of Southeast Asia are made up of islands?

After nearly 400 years of Spanish colonial rule, **the Philippines** was governed by the United States from 1898 to 1946.



Houses in **Myanmar** (Burma) are built on poles above the ground to protect the inhabitants against floods and wild animals.

Bangkok, Thailand's capital, has more than 300 Buddhist temples.

Cambodia has faced almost constant warfare since the 1960s.

About 32 percent of **Malaysia's** population is Chinese, most of whom live in cities.

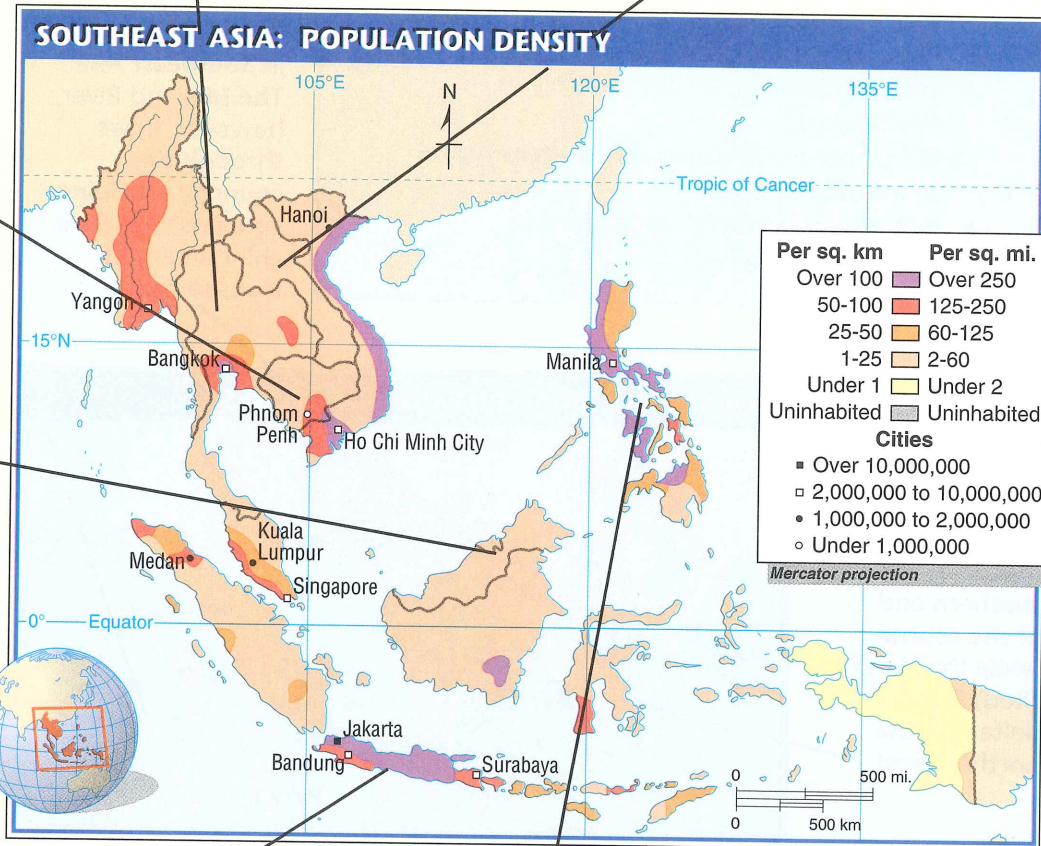
Thailand is the only nation in Southeast Asia that has never been ruled by a Western power.

About two-thirds of **Thailand's** population lives in rural areas.

Most Laotians live along the **Mekong River** and its tributaries and grow rice.

Fertile plains created by the **Mekong River's** floodwaters are home to most Cambodians.

About 67 percent of **Brunei's** people live in urban areas.

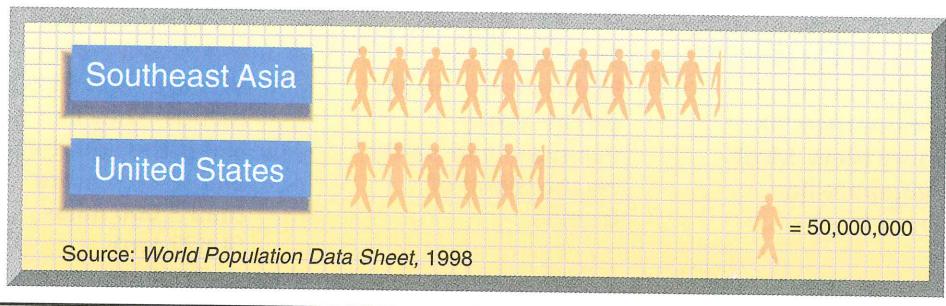


With a population of 207.4 million, **Indonesia** is the fourth most populous country in the world, after China, India, and the United States.

Only about 900 of the **Philippines's** 7,000 islands are inhabited.

About half of the **Philippines's** population of 75 million live on the island of **Luzon**.

Population: Southeast Asia and the United States



Southeast Asia has about one and a half times as many people as the United States.

Physical Geography

CHARTING YOUR COURSE

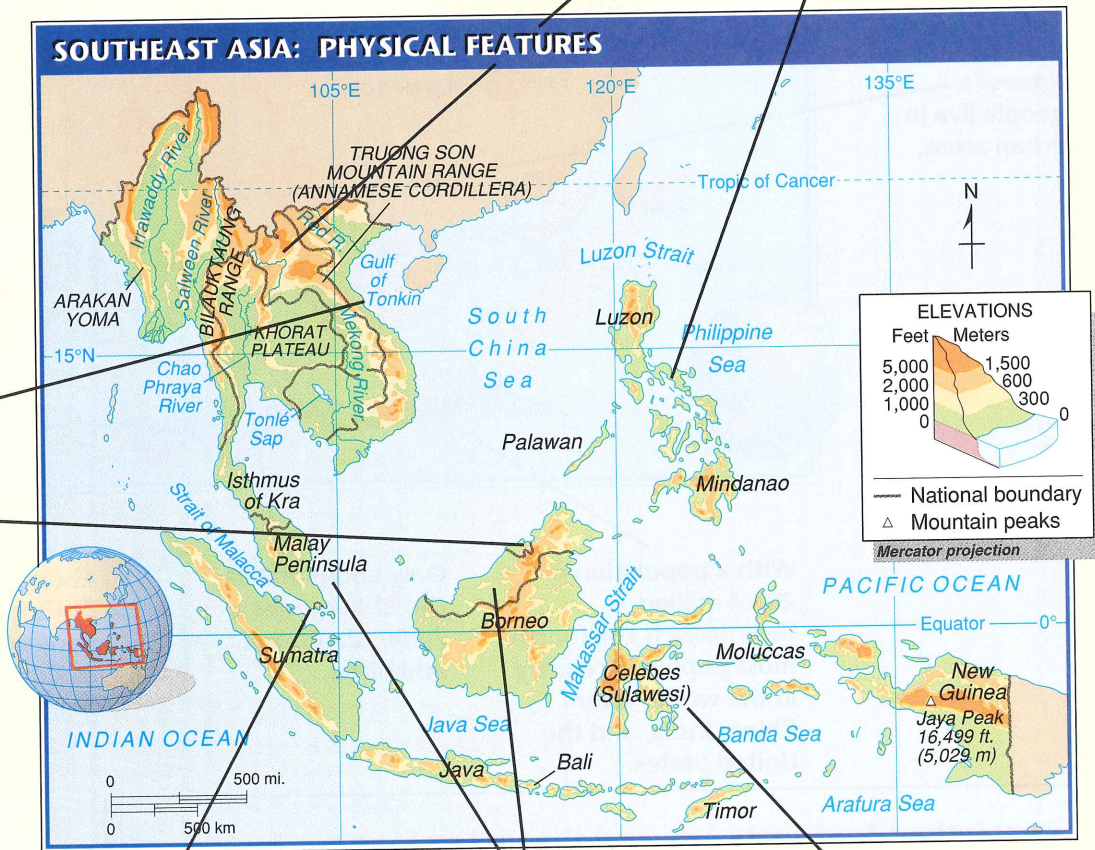
1. What body of water separates the Malay Peninsula and the island of Sumatra?
2. What Southeast Asian country is landlocked?
3. What are three natural resources found in Southeast Asia?
4. What major rivers are located in Southeast Asia?

Laos is the only landlocked country in Southeast Asia. The Mekong River, however, flows through the country, providing Laotians with their chief means of transportation.

Of the more than 7,000 islands in the **Philippines**, the 11 largest make up 95 percent of the country.

Vietnam is composed of two river deltas. The Mekong River delta is at the southern end of the country, while the Hong (Red) River delta is at the northern end.

Most of **Brunei** is flat and forest-covered.



Singapore consists of one main island and more than 50 offshore islets. Most of Singapore lies near sea level.

The country of **Malaysia** lies partly on the Malay Peninsula and partly on the island of Borneo.

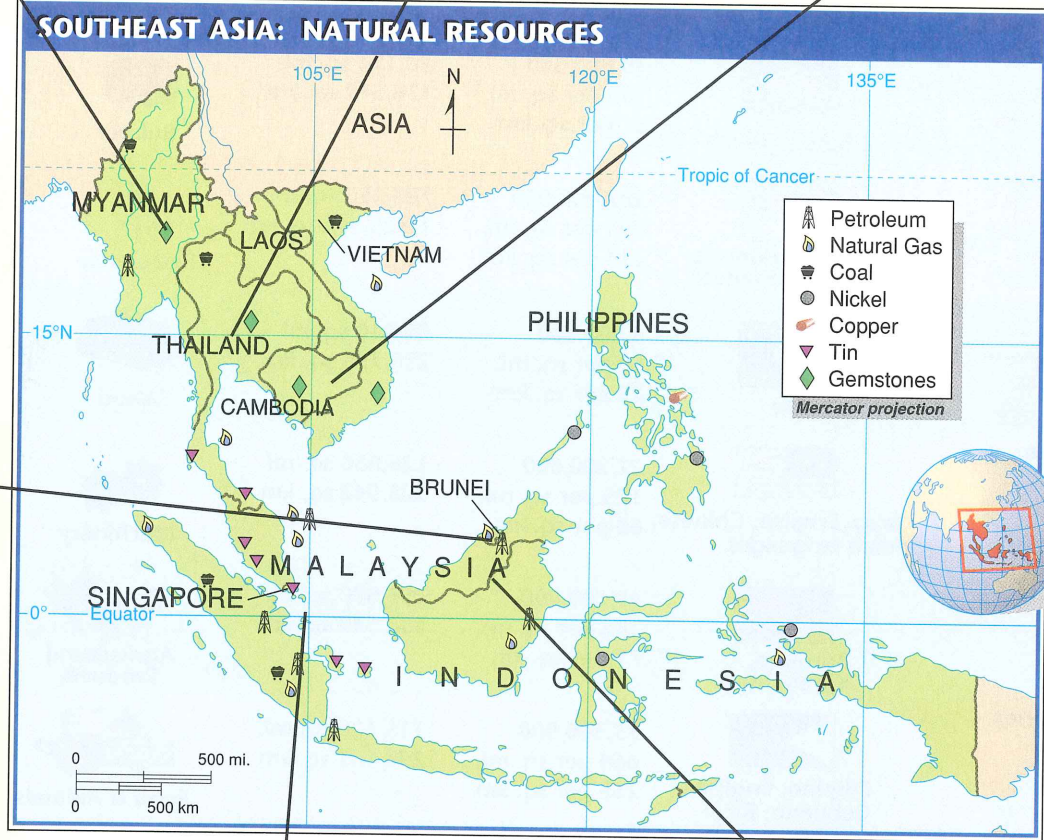
Indonesia consists of more than 13,600 islands. They lie along the Equator and stretch more than 3,000 miles (4,827 km).

Myanmar's forests contain about 80 percent of the world's teakwood.

Rubber trees thrive in **Thailand's** southern region. The area also has large tin deposits.

Cambodia's flat land, plentiful water, and tropical climate are ideal for growing rice, the country's chief crop.

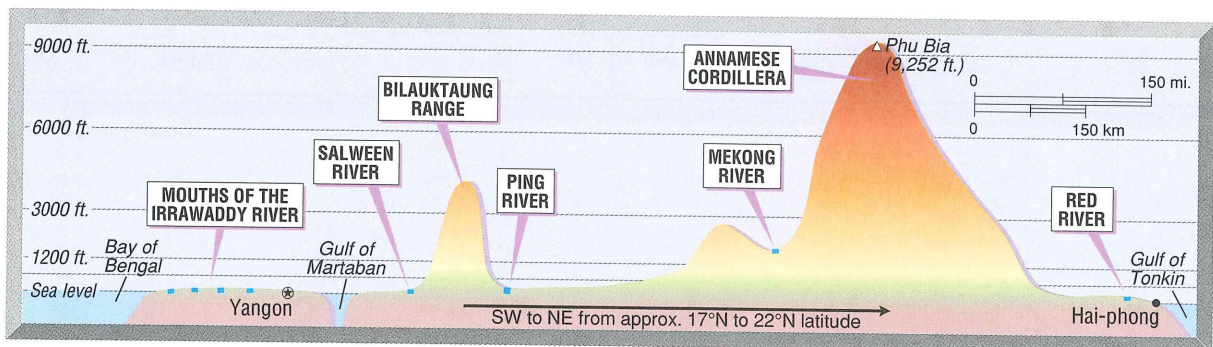
Brunei has valuable natural gas and petroleum deposits beneath its coastal waters.















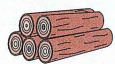















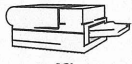



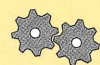







Singapore, with its cool sea breezes and tropical climate, is an attractive tourist spot.

Malaysia leads the world in production of natural rubber and palm oil.

Mainland Southeast Asia: Physical Profile



COUNTRY* AND CAPITAL	FLAG AND LANGUAGES	POPULATION	LANDMASS	PRINCIPAL EXPORT	PRINCIPAL IMPORT
Brunei  Bandar Seri Begawan	 Malay, English, Chinese	300,000 155 per sq. mi. 60 per sq. km	2,035 sq. mi. 5,271 sq. km	 Petroleum	 Machinery
Cambodia  Phnom Penh	 Khmer, French	10,800,000 158 per sq. mi. 61 per sq. km	68,154 sq. mi. 176,519 sq. km	 Rubber	 Machinery
Indonesia  Jakarta	 Bahasa Indonesia (Malay), Javanese	207,400,000 294 per sq. mi. 114 per sq. km	705,190 sq. mi. 1,826,442 sq. km	 Petroleum	 Machinery
Laos  Vientiane	 Lao	5,300,000 59 per sq. mi. 23 per sq. km	89,110 sq. mi. 230,795 sq. km	 Wood	 Food
Malaysia  Kuala Lumpur	 Malay, English, Chinese, Indian languages	22,200,000 175 per sq. mi. 68 per sq. km	126,850 sq. mi. 328,542 sq. km	 Machinery	 Machinery
Myanmar  Yangon	 Burmese, Karen, Shan	47,100,000 185 per sq. mi. 71 per sq. km	253,880 sq. mi. 657,549 sq. km	 Agricultural Products	 Machinery
Philippines  Manila	 Pilipino, English, Cebuano, Bicol	75,300,000 654 per sq. mi. 252 per sq. km	115,120 sq. mi. 298,161 sq. km	 Food & Animals	 Machinery
Singapore  Singapore City	 Chinese, English, Malay, Tamil	5,900,000 16,415 per sq. mi. 6,338 per sq. km	236 sq. mi. 611 sq. km	 Office Machines	 Petroleum
Thailand  Bangkok	 Thai, Chinese, Malay, regional dialects	61,100,000 310 per sq. mi. 120 per sq. km	197,250 sq. mi. 510,878 sq. km	 Machinery	 Machinery
Vietnam  Hanoi	 Vietnamese, Chinese	78,500,000 625 per sq. mi. 241 per sq. km	125,670 sq. mi. 325,485 sq. km	 Fuels	 Machinery

*Country maps not drawn to scale.



Rice is an important crop grown on the Philippine island of Luzon.

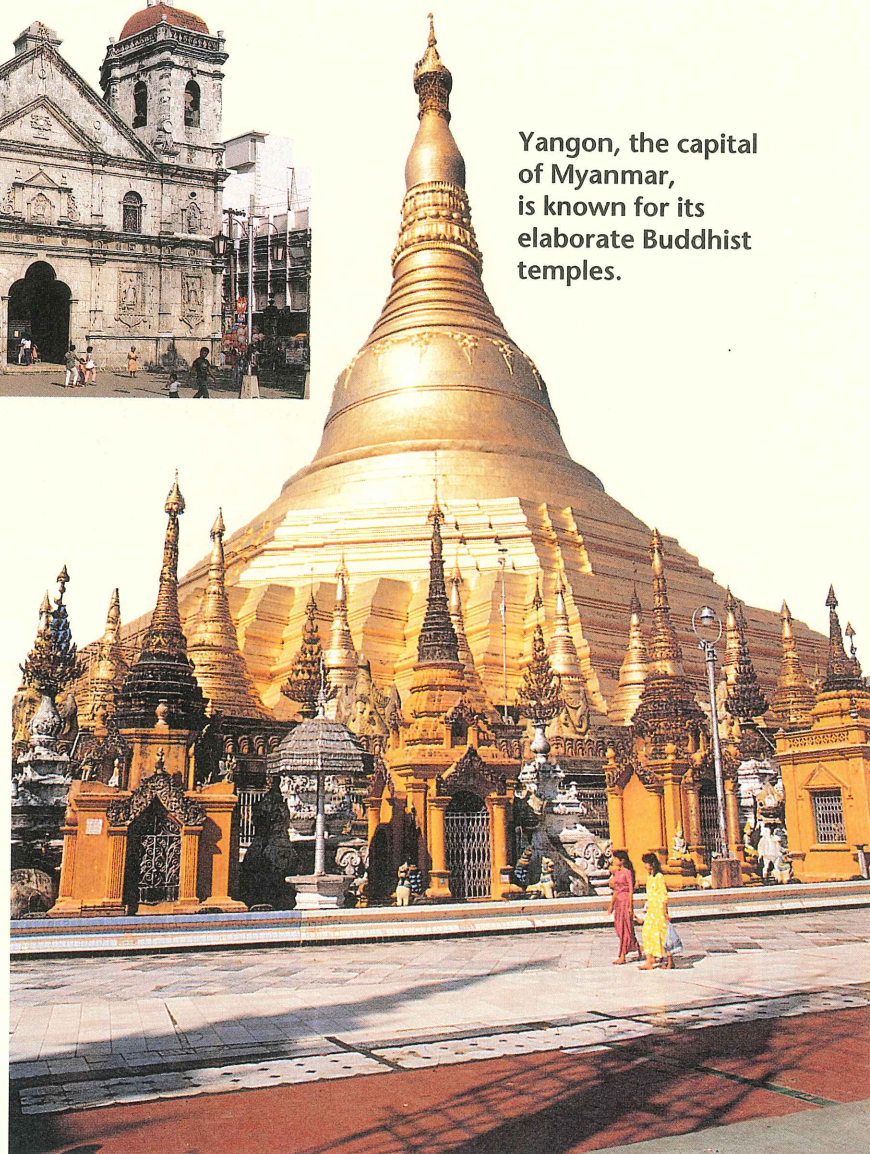


The Akha people are one of many different ethnic groups living in the mountains of northern Thailand and Myanmar (Burma).

This European-style church reflects the influence of Spain and the Roman Catholic Church on the Philippines.

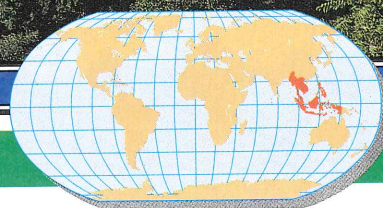
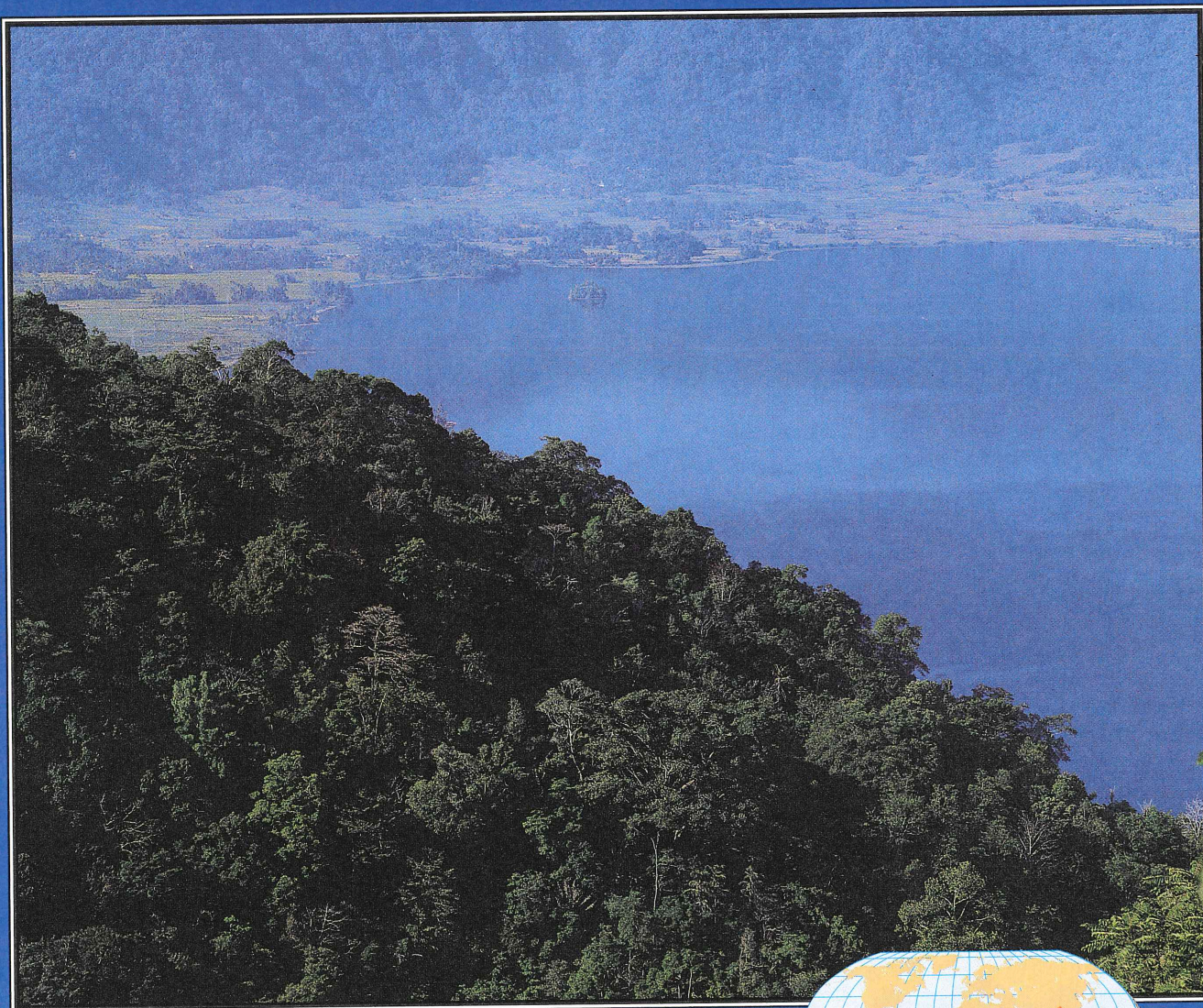


Yangon, the capital of Myanmar, is known for its elaborate Buddhist temples.



Villages and farms line the banks of the Mekong River in Vietnam.

The Physical Geography of Southeast Asia



CHAPTER FOCUS

Geographic Setting

About half of the nations of Southeast Asia lie on the Indochina and Malay peninsulas, while the others are in the Malay Archipelago. Because Southeast Asia straddles the Equator, the region's climate is largely tropical.



Geographic Themes

Section 1 The Land

PLACE The mainland and the islands differ geographically in important ways.

▲ **Photograph:** Mountains on the island of Sumatra, Malaysia

Section 2 The Climate and Vegetation

LOCATION The climate and vegetation of Southeast Asia are consistent with their tropical location—the hot, humid, rainy climate gives rise to rain forest vegetation throughout much of the region.

SETTING THE SCENE

Read to Discover . . .

- the natural forces that shaped Southeast Asia.
- how mainland and island Southeast Asia are alike and how they are different.
- the kinds of natural resources found in Southeast Asia.

Key Terms

- cordillera
- archipelago
- flora
- fauna

Identify and Locate

Indochina Peninsula, Malay Peninsula, Ring of Fire, Annamese Cordillera, Makassar Strait, Irrawaddy River, Chao Praya River, Mekong River

Bangkok, Thailand

Swatdee! Right now I'm on vacation on a small island south of Thailand. The island is called Pooket Island, and it has beautiful beaches. Tourists come here to relax and have fun. Wish you were here.

Noy Khunviset



Pooket Island—Noy Khunviset's vacation spot—is one of many scenic coastal areas in the culture region of Southeast Asia. Having mostly a tropical climate, Southeast Asia is mountainous, with fertile river valleys. The region is made up of 10 countries: Thailand, Vietnam, Laos, Cambodia, Myanmar (formerly called Burma), Malaysia, Singapore, the Philippines, Indonesia, and Brunei. The similarities and differences among the cultures of these countries often reflect the influence of other Asian countries and European colonial rule.

Since World War II, the countries of Southeast Asia have seen continual political upheaval and warfare. At the same time, the region has made great advances economically.

Southeast Asian countries are also taking steps to cooperate in solving regional problems.

PLACE

Peninsulas and Islands

Southeast Asia was formed by the collision of the Eurasian, Philippine, and Indo-Australian tectonic plates millions of years ago. The clashing of the plates where India joined Asia forced up the mighty Himalayas and created **cordilleras**, or parallel mountain ranges, and river valleys in the Indochina Peninsula. To the east, volcanic and earth-





quake activity gave rise to a number of **archipelagoes**, or island groups.

Until 15,000 years ago, when sea levels were lower, there was a continent that connected what are now the islands of Sumatra, Java, Bali, Borneo, and Palawan (one of the western islands of the Philippines) with the mainland. With the rise in water levels caused by the melting at the end of the last Ice Age, much of the exposed land mass was covered, leaving a series of islands. This development had several important effects. It isolated the **flora**, the plants, and **fauna**, the animals, of the islands. It created a region with a longer coastline than any other comparable area in the world. In addition, it made the region's trade and communication dependent on water routes.

Mainland Southeast Asia

With only one exception, Southeast Asia can be divided into mainland and island countries. Five countries of Southeast Asia lie entirely on the mainland. Vietnam, Laos, Cambodia, and Myanmar lie entirely on the Indochina Peninsula. Thailand lies mainly on the Indochina Peninsula, but also trails southward to the Malay Peninsula.

Malaysia includes the southern end of the Malay Peninsula, as well as the northern part of the island of Borneo.

Island Southeast Asia

Singapore, sometimes referred to as a city-state, lies on an island at the southern tip of the Malay Peninsula. Another island country, Indonesia, is made up of 13,677 islands from the Indian Ocean to Papua New Guinea.

Brunei, a small country on the north edge of the island of Borneo, and the Philippines, an archipelago made up of 7,107 islands, are the remaining island countries.

HUMAN/ENVIRONMENT INTERACTION

Mountains

The mountains of mainland Southeast Asia run mainly in north-south ridges. Three of these ridges are the Arakan Range in western Myanmar; the Bilauktaung (bi•LOWK•towng) Range, which runs along the border of Myanmar and Thailand; and the Annamese Cordillera, which separates Vietnam from Laos and Cambodia.

Although few peaks rise above 10,000 feet (about 3,000 m), these ranges are dominant landforms. The highlands in the west and north meet to form a natural barrier between India and China. The ridges also form barriers between and within the Southeast Asian countries.

Mountains on the islands of Southeast Asia are part of the spectacular Pacific Ring of Fire. These volcanoes—many still active—have formed craters on the islands of Indonesia and the Philippines.

Indonesia alone has 327 volcanoes, 200 of which were once active, and 127 that are active today. One of the most famous, Krakatoa, was located in the strait between the islands of Java and Sumatra. In 1883, Krakatoa erupted violently, causing many deaths and great destruction.

Today a staff of volcano watchers in Java regularly checks active sites, prepared to alert the population when there is danger of an eruption.

The 1991 eruption of Mt. Pinatubo some 55 miles (about 90 km) north of Manila, the Philippine capital, was one of the most recent examples of volcanic action in the Ring of Fire. It is said to have been the most powerful volcanic eruption in the 20th century. The lava severely damaged the town of Angeles and destroyed the American-controlled Clark Air Base, covering it with nearly a foot of ash.



SOUTHEAST ASIA: PHYSICAL-POLITICAL



FOCUS ON GEOGRAPHIC THEMES



- Place:** What neck of land connects the Malay Peninsula to the rest of the mainland?
- Region:** What region includes Vietnam, Laos, and Cambodia?
- Place:** What city is the capital of Myanmar?
- Location:** What seas lie to the east and west of the Philippines?

The volcanoes of the region, however, do not only bring destruction. They are also the source of the fertile soil regions in the islands, which are some of the most productive agricultural areas in the world. Volcanic ash, full of rich nutrients, enriches the soil so much that even wooden fence posts sometimes sprout and grow into dense thickets within a few years.

MOVEMENT

Rivers

The rivers of mainland Southeast Asia flow in the north-south valleys between mountain ranges. The food supply, communication, and transportation throughout the region depend heavily on these waterways. The major rivers include the Irrawaddy in Myan-



mar; the Chao Phraya (chau PRY•uh) in Thailand; the Mekong, which runs along the Thailand/Laos border through Cambodia and southern Vietnam; and the Hong (Red) River in northern Vietnam.

Mainland rivers have their origins in the northern highlands. Some of them—like the Mekong which flows for 2,600 miles (about 4,180 km)—begin as far north as China. Silt and sediment deposits left by mainland rivers create fertile agricultural regions. The sediment deposits left by the Mekong are increasing shorelines as much as 50 feet (15 m) per year.

Rivers on Southeast Asian islands are generally shorter than the mainland rivers and flow in all directions. In Indonesia most rivers run in a northerly direction, cutting horizontally across the narrow islands. On the island of Borneo, the rivers tend to start near the center and run out toward the edges like spokes on a wheel.

HUMAN/ENVIRONMENT INTERACTION

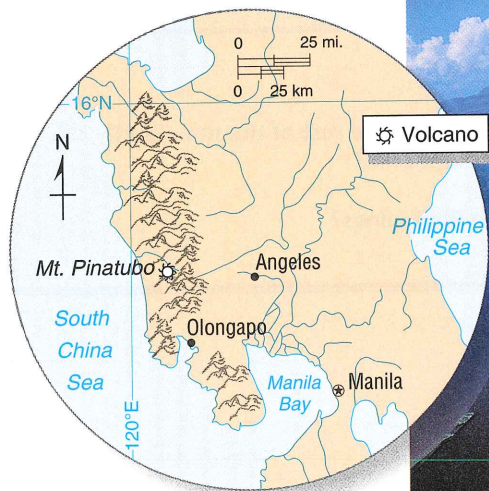
Natural Resources

The Sultan of Brunei, one of the richest people in the world, made his fortune from oil and natural gas discovered on the northern coast of the island of Borneo. Fossil fuels are also found in Malaysia, Indonesia, Myanmar, and Vietnam. Coal is found in Vietnam and the Philippines.

Minerals

Minerals and gems are another important resource and product of regional trade. Deposits of nickel and iron in Indonesia, copper-concentrates in the Philippines, and tin in Thailand, Myanmar, Laos, and Malaysia—which has the world's largest tin deposits—are mined.

Myanmar, Thailand, Cambodia, and Vietnam produce breathtaking sapphires and ru-



Geographic Themes

Place: Luzon, The Philippines

Volcanic mountains rise on most of the islands of the Philippines. *What recent Philippine volcanic eruption is said to have been the most powerful in this century?*



bies. Burma rubies, as they are called, are especially prized by gem dealers.

Pearls are found near Sulu and Palawan in the Philippines. In 1934, the largest natural pearl ever found, weighing about 14 pounds (6.4 kg), was discovered in Palawan.

Another product from the earth, natural steam, is also a valuable resource. Trapped in volcanoes the steam has been tapped through wells. It is a source of geothermal energy used to generate electricity.

Flora and Fauna

Mahogany from the Philippines, teak from Myanmar, and rubber from Malaysia are among the trees that are an important resource in Southeast Asia. Because of heavy and unregulated deforestation, several Southeast Asian nations have restricted logging.

The forests also provide important pharmaceuticals. More than 10 percent of prescription drugs are made from products of tropical forests. Thailand has also developed the 1,000-plus species of orchids found there into a valuable trade resource.

The wildlife of Southeast Asia, such as elephants, tigers, several species of rhinoceros, and orangutans, is also considered a resource. Hundreds of animals in the region are found nowhere else in the world. Some of these include the bearded pig of Borneo, the Malayan lacewing butterfly, and Indonesia's Komodo dragon, the largest lizard in the world.

The people of Southeast Asia have an invaluable resource in the 2,500 fish species that thrive in the surrounding tropical waters. Fish are especially found in large quantities in the rivers of mainland Southeast Asia and in the seas near the Philippines, Indonesia, and Myanmar. Seafood, a major source of protein, is eaten in Southeast Asia at almost twice the world average.

Traditionally, local fishers in the region have gone out in sailing boats or canoes to make their catches with lines or traps. In recent decades, the region's small fishers have had to compete with a rapidly growing fleet of trawlers. The result has been an increased



Geographic Themes

Place: Malaysia

Malaysia's economy depends heavily on the use of natural resources. Malaysia is the world's leading producer of natural rubber. *What mineral resource is mined in Malaysia?*

yield everywhere in the region. Fish farming is now a major supplement to the economies of Southeast Asian countries. Concerns about the dangers of overfishing, however, have been raised; and the production of seafood for export has started to level off.

SECTION 1 ASSESSMENT

Checking for Understanding

- 1. Define** cordillera, archipelago, flora, fauna.
- 2. Locating Places** Through which countries does the Mekong River flow?
- 3. Region** What are two ways in which the mainland and the islands of Southeast Asia differ? In what two ways are they similar?
- 4. Region** What are some of the natural resources found in Southeast Asia?

Critical Thinking

- 5. Analyzing Information** Where on the mainland would you expect to find the most densely populated areas?



The Climate and Vegetation

SETTING THE SCENE

Read to Discover . . .

- the climate regions of Southeast Asia.
- the different kinds of vegetation in Southeast Asia.

Key Terms

- monsoon
- endemic
- deforestation

Identify and Locate

Climate regions: tropical rain forest, tropical savanna

Most of Southeast Asia lies within the tropics and has a tropical climate controlled by the **monsoons**, or seasonal winds. In summer, the moisture-laden monsoons blow from the cooler seas toward the warmer land. In the winter, the dry monsoons blow from the cooling land out to sea.

REGION

Southeast Asia's Climate Regions

Although Southeast Asia largely has a tropical climate, there are exceptions in the region's climate patterns due mainly to latitude, elevation, and local wind patterns. For example, the northernmost parts of Laos and Vietnam are humid subtropical and from November to April are cool and dry with temperatures averaging around 61°F (16°C). The Shan Plateau in Myanmar, called by one traveller a "tropical Scotland," is elevated and cooler than the rest of the country.

Tropical Rain Forest

A tropical rain forest climate—uniformly hot, humid, and rainy throughout the year—is found throughout the islands of Southeast Asia, as well as on the eastern and western coasts of the Indochina Peninsula. The average daily temperature in much of this area hovers around 79°F (26°C). Regional rainfall

averages 79 to 188 inches (201 to 478 cm) per year, and the humidity reaches between 80 and 90 percent.

Even within this climate region there is some variation. For example, the farther away an area is from the Equator, the more concentrated the wet season becomes and the more pronounced the dry season becomes. The farther inland, the more rainfall there is likely to be. Other examples of local peculiarity are found in peninsular Malaysia, where most of the rain falls during thunderstorms, and in Singapore, where there are about 180 days with lightning each year.

Tropical Savanna Climate

A tropical savanna climate region extends southeastward across the Indochina Peninsula to the Philippines. It is characterized by alternate wet and dry seasons. In this climate region, monsoon winds bring rain from May or June through October. October to April is the dry season, with the first few months being cooler and the last few being hot. In most of the region monsoon winds blow during the dry months.

An exception is in eastern Indonesia. There, the rainy seasons are reversed, with the South Pacific trade winds bringing the hot, dry season from May to September, and the monsoons bringing the wet season from December to March.



Local peculiarities on the mainland include Sittwe (Akyab) in Myanmar, which gets an average of 204 inches (5,182 mm) of rain each year. Temperatures can drop to freezing in December and January in the Kieng Khoung province of Laos.

cultivation—a crucial element in the agricultural life of the region. The rains also nourish the tropical rain forests that cover most of the area.

Importance of Rains

The heavy rains in Southeast Asia are important in several ways. They cause the flooding of the rivers, which is essential to wet rice

Vegetation

The vegetation of Southeast Asia is varied and abundant, characteristic of tropical rain forest and savanna climate regions. Southeast Asia contains 13 different types of tropical rain



forest, and Malaysia alone has more than 145,000 species of flowering plants. The flora of Southeast Asia consists mainly of tropical and subtropical species, but also includes such rarities as cacti in central Myanmar. Tropical-savanna grasslands extend southeastward across the Indochina Peninsula and are also found in some of the easternmost islands, the areas in the region farther from the Equator.

Forests

The forests of Southeast Asia are very old. The Malaysian rain forest is believed to be the oldest in the region, dating back 130 million years. The makeup of Malaysia's forests is an example of the mix of different types of tropical rain forest. Below 2,000 feet (610 m) are the lowland rain forests. Above 2,000 feet (610



m), highland forest areas are found, while above 4,000 feet (1,220 m) there are mossy forests. In the river valleys, peat swamp forests thrive, while sandy coastal soil supports various shrubs, and the tidal mud flats are covered with mangrove swamp forests.

An Unusual Case

Singapore's vegetation makes it an exception in the region. Although Singapore is a highly developed urban area with one of the highest population densities in the world, it is one of the only two cities in the world to have areas of tropical rain forest within its boundaries (the other is Rio de Janeiro, Brazil). It may be hard to believe that where towering apartment blocks now house 2.7 million people, dense rain forest surrounded by mangroves once covered the island.

Singapore's vegetation is also unusual in that many of the **endemic** species—those native to a particular area—are now gone. Almost 80 percent of the trees and shrubs now growing in Singapore were imported, some from as far away as Central and South America. Along with the loss of its natural habitat, Singapore has lost many of its larger mammals and its variety of exotic animals.

Deforestation

During the 1970s and 1980s, the demand for natural resources, the creation of jobs, and the need for more open land led Southeast Asian nations to introduce deforestation programs. **Deforestation** refers to the removal of large areas of forest by loggers and farmers. Although a useful short-term solution to economic problems, deforestation has had disastrous consequences in the region, often reducing rich forest areas to wastelands. Thailand, for example, has lost half of its forests as a result of logging. Throughout the region, the loss of rain forest has decreased soil quality, created erosion problems, and caused water contamination. Logging has also encroached on lands belonging to local groups, affecting their traditional livelihoods and causing political dissent.



Geographic Themes

Human/Environment Interaction: Northern Thailand

Southeast Asia's forests and plains produce an abundance of flowers that are used for decoration and for festivals. *What human activity poses a threat to Southeast Asia's forests?*

Since the late 1980s, the governments of a number of Southeast Asian countries have tried to reduce logging and the export of timber, but without complete success. Brunei, for example, forbade lumber exports starting in 1989, and Thailand did the same.

SECTION 2 ASSESSMENT

Checking for Understanding

- Define** monsoon, endemic, deforestation.
- Locating Places** In which climate region is Southeast Asia mainly located?
- Region** What are the variations found in the climates of Southeast Asian countries?
- Region** How does the tropical climate affect vegetation in Southeast Asia?

Critical Thinking

- Determining Cause and Effect** How does deforestation affect the livelihood of Southeast Asia's people?



CRITICAL THINKING SKILLS

Determining Cause and Effect

Suppose you leave for school one morning and forget to put a carton of milk back into the refrigerator. When you return in the afternoon, the milk has spoiled. What is the connection between these two events?

REVIEWING THE SKILL

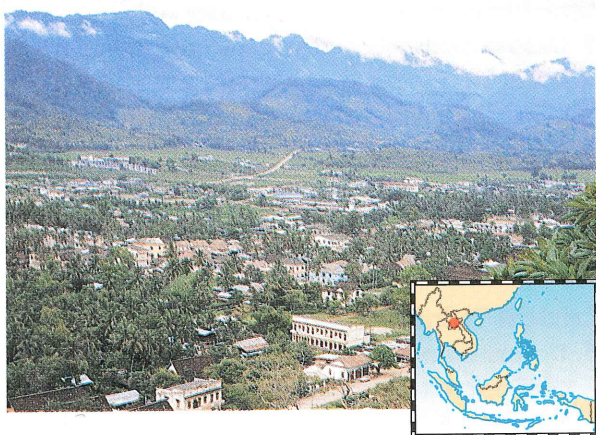
Events occur because other events make them happen. An event or person that makes something happen is called a **cause**. In the example above, forgetting to refrigerate the milk caused it to spoil. The **effect**, or result, was the spoilage. The relationship between these two events is called a cause-and-effect relationship. Cause-and-effect relationships explain why things happen and how actions produce other actions.

Cause-and-effect relationships can be simple or complex. Sometimes several different causes produce a single effect. For example, a car accident may have several causes—poor road conditions, a tired or ill driver, faulty equipment. On the other hand, one cause can produce several effects. Burning fossil fuels, such as gasoline and coal, may improve productivity and standard of living but also increases air pollution and global warming.

An effect often becomes the cause of another event. For example, burning fossil fuels causes more greenhouse gases in the atmosphere; the greenhouse gases increase the global temperature. Global warming may cause ice caps to melt, which would increase the amount of water in the sea, which may cause floods in coastal areas. Strings of causal relationships are called **cause-effect chains**.

When determining cause and effect:

- Ask questions about why events occur.
- Identify the outcomes of events.



- Look for cause-and-effect relationships among events. Sometimes clue words or phrases, such as *led to*, *brought about*, *produced*, *because*, *as a result of*, *so that*, *thus*, *as a consequence*, and *therefore*, indicate these relationships.

PRACTICING THE SKILL

A. Identify causes and effects in the following statements. Remember that there may be more than one of each.

1. The mountain ridges, river valleys, and volcanic islands of Southeast Asia were formed by the collision of the Eurasian and Indo-Australian tectonic plates millions of years ago.
 2. The mountain ridges of Southeast Asia produce natural barriers with India and China and also between peoples living within the region.
 3. Erupting volcanoes bring destruction but also produce fertile soil and a source of geothermal energy.
 4. Water has been the primary method of transportation and trade in Southeast Asia because of its enormous coastline and long rivers.
 5. As distance from the Equator increases, wet and dry seasons become more concentrated and defined.
 6. Heavy rainfall brings about river flooding, which is essential to rice cultivation.
- B.** Use the material in Chapter 29 to identify these cause-and-effect relationships.
1. Name three effects produced by the rising water levels after the last Ice Age.
 2. Identify two causes and three effects of deforestation in Southeast Asia.

For additional practice in determining cause and effect, see Practicing Skills on page 608 of the Chapter 29 Assessment.



The Glencoe Skillbuilder Interactive Workbook, Level 2 provides instruction and practice in key social studies skills.

1

SECTION

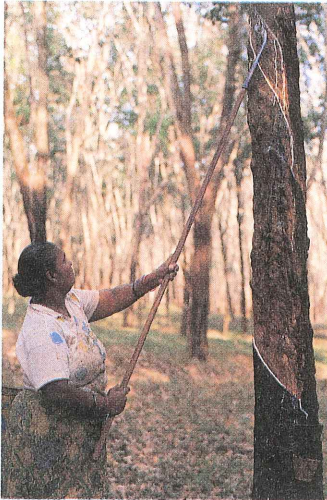
The Land

KEY TERMS

cordillera (p. 597)
archipelago (p. 598)
flora (p. 598)
fauna (p. 598)

SUMMARY

- The region of Southeast Asia includes the 2 peninsulas east of India and south of China and the 20,000 islands of the Malay Archipelago.
- Southeast Asia's mountains were formed by the collision of the Indo-Australian plate and the Philippine plate with the Eurasian plate.
- The rivers on the mainland of Southeast Asia are important for agriculture, communication, and transportation.
- Southeast Asia has major reserves of fossil fuels, tropical hardwoods, tin, and gems.



Rubber plantation in Malaysia

2

SECTION

The Climate and Vegetation

KEY TERMS

monsoon (p. 602)
endemic (p. 605)
deforestation (p. 605)

SUMMARY

- Most parts of Southeast Asia have a hot and humid climate affected by monsoons.
- A tropical rain forest climate region is found throughout the islands of Southeast Asia, as well as on the eastern and western coasts of the Indochina Peninsula.
- A tropical savanna climate region extends southeastward across the Indochina Peninsula. Some of the southernmost islands in the region also share this climate.
- The vegetation of Southeast Asia consists largely of varieties of tropical rain forest.
- Deforestation in Southeast Asia has affected the ecology, the economy, and the culture of some of the peoples.



Floral festival in Thailand



Reviewing Key Terms

Choose the vocabulary term that best completes each of the sentences below. Write your answers on a separate sheet of paper.

- cordilleras (p. 597)
- archipelago (p. 598)
- flora (p. 598)
- fauna (p. 598)
- monsoons (p. 602)
- endemic (p. 605)
- deforestation (p. 605)

SECTION 1

1. A(n) _____ is a group of islands.
2. _____ refers to the vegetation of a region.
3. Parallel mountain ranges, such as those found on the Indochina Peninsula, are known as _____.
4. _____ refers to the animals of a region.

SECTION 2

5. _____ means native to one particular area.
6. _____ occurs when many trees are logged without regard for the environment.
7. _____ are winds that shift with the seasons.

Reviewing Facts

SECTION 1

8. What are three important landform types in Southeast Asia?
9. What geographic factor is responsible for the most fertile soils on mainland Southeast Asia? On the islands?
10. Name a Southeast Asian resource found underground, underwater, and in a tropical rain forest.

SECTION 2

11. Describe the two dominant climate regions found in Southeast Asia.
12. Why is deforestation a problem for Southeast Asia?

Critical Thinking

13. **Predicting Consequences** What kinds of transportation difficulties might Southeast Asians face on the mainland?
14. **Drawing Conclusions** Southeast Asia has a diversity of peoples and cultures. How might physical geography have shaped this diversity on the mainland? On the islands?



Geographic Themes

15. **Place** Why are the many volcanoes of the Ring of Fire useful as well as dangerous?
16. **Region** What vegetation is found in Southeast Asia's tropical rain forest climate region?



Practicing Skills

Determining Cause and Effect

Refer to the Determining Cause and Effect skill feature on page 606.

Find three cause-and-effect relationships in Chapter 29. For each one, identify the causes and effects.

Using the Unit Atlas

Refer to the physical geography section of the Unit Atlas on pages 592–593.

17. What body of water separates the two major land areas of Malaysia?
18. What landforms make up the nation of Indonesia?

Projects

Individual Activity

You have learned about some of the resources of Southeast Asia, such as gems, orchids, timber, and minerals. Imagine that you work in an exporting business in a Southeast Asian country. Write a report on the problems you might encounter as you try to prepare a particular resource for export.

Cooperative Learning Activity

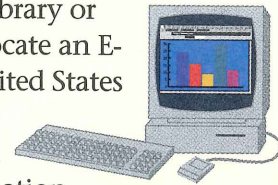
Working in a group of four, plan a trip through Southeast Asia. Decide what areas to visit, noting the kinds of landforms to be seen in each place. Determine how to get from one place to another, and work together on a map that shows the route. Prepare a written itinerary and present the travel plans to the class.

Writing About Geography

Description Use your journal, a film, a book, or a magazine with photographs to investigate a variety of physical features in Southeast Asia. Then write a newspaper story about a volcanic area in the Philippines, a rain forest in Malaysia, or the Mekong Delta in Vietnam.

Technology Activity

Using E-Mail Use a library or access the Internet to locate an E-mail address for the United States Embassy in Manila, the Philippines. Compose a letter requesting information about the 1991 eruption of Mount Pinatubo. Using this information, create a bulletin board showing the chronology of the eruption. Provide photographs and captions.



Locating Places

SOUTHEAST ASIA: PHYSICAL GEOGRAPHY

Match the letters on the map with the places and physical features of Southeast Asia. Write your answers on a separate sheet of paper.

- | | |
|--------------------|----------------|
| 1. Singapore | 6. Vietnam |
| 2. Irrawaddy River | 7. Philippines |
| 3. Thailand | 8. Java |
| 4. Malay Peninsula | 9. Sumatra |
| 5. Mekong River | 10. Borneo |

