GeoJournal
As you read this chapter, use your journal to log information about the economies and the environmental challenges in Southeast Asia. Note interesting details that show similarities and differences among the region’s countries.

Chapter Overview Visit the Glencoe World Geography Web site at tx.geography.glencoe.com and click on Chapter Overviews—Chapter 31 to preview information about the region today.
Living in Southeast Asia

A Geographic View

Open-Air Market

...I visited the...colorful open-air market in Kota Baharu, way up north near (Malaysia's) border with Thailand. The merchants were nearly all women. Wearing full-length batik sarongs of bright red, orange, pink, and purple, with coordinated scarves of emerald green or royal blue around their heads, they sat beside huge piles of fruit and vegetables, truckloads of fish and chicken, mountains of rice, and tall wicker baskets filled with eggs—turtle eggs, stork eggs, even chicken eggs.


This market scene takes place in Malaysia, one of Southeast Asia’s most rapidly developing countries. Like some other countries in the region, Malaysia is setting up new industries, yet it continues to rely on agriculture for its economic well-being. In this section you will learn about how people live and work in Southeast Asia today. You will also see how the region’s countries face many of the same challenges and have come to depend on one another for increased economic growth.

Agriculture

Southeast Asia’s fertile river valleys and plains are a major source of livelihood for its people. Southeast Asians depend on the rich variety of crops grown in these areas to supply their own food needs as well
Rice grows well in Southeast Asia because most of the region has fertile soil, an abundant water supply, and a warm, wet climate. Some kinds of rice plants need a continuous supply of water from the time they are planted until just before harvest. Flooded rivers and abundant rainfall provide this water to Southeast Asia. In parts of Thailand, Cambodia, and Vietnam, seasonal flooding of the Chao Phraya and Mekong Rivers irrigates paddies, or flooded fields in which rice is grown. Rain also provides enough water to grow rice in the Irrawaddy River delta in Myanmar and in parts of the Philippines.

Farmers plant rice at the start of the rainy season, usually in May, and the crop is ready to harvest in October. They can then grow a second rice crop during the dry season by irrigating rice fields with water stored from rains and flooding rivers. Rice farming can be difficult work because many farmers do not use modern machinery. They plant and harvest their crops by hand, using simple tools such as sickles—long, sharp, curved knives. Water buffalo or oxen are often used to pull plows.

**Other Crops**

Southeast Asian farmers grow cassava, yams, corn, bananas, and other food crops in areas too dry for a second planting of rice. Some Indonesian farmers have begun to grow cassava, an edible root, as an alternative subsistence crop because it is easier to grow than rice. A subsistence crop is a crop grown mainly to feed the farmer’s family. Many families in Southeast Asia have small subsistence garden plots that produce a variety of vegetables, and some people also raise pigs and poultry for food.

Plantations in Southeast Asia’s coastal lowlands provide many of the region’s cash crops—crops raised to be sold for profit. Rubber is an important cash crop, and Thailand, Indonesia, and Malaysia lead the world in natural rubber production. Sugarcane grows in the Philippines and on the Indonesian island of...
Java. The Philippines is also one of the largest producers and exporters of coconuts. Other regional exports include coffee, palm oil, and spices.

Forests and Mines

Forestry, which includes jobs in logging, transporting logs, and manufacturing finished goods, is important to many Southeast Asian countries. It is a major industry in Vietnam, where factories produce plywood and lumber, pulp and paper, and furniture products. Myanmar leads the world in teakwood exports. Teakwood, ebony, mahogany, and bamboo, in the form of lumber and finished products, are vital to the economies of Malaysia, the Philippines, Indonesia, and Thailand. Although excessive logging has contributed to deforestation in the region, several Southeast Asian countries are working to make their economic goals compatible with environmental goals.

Mineral Wealth

Rich mineral deposits lie within Southeast Asia’s numerous mountains. Workers in several countries drill and blast their way to deposits of tin, iron ore, manganese, and tungsten. Malaysia, Thailand, and Indonesia are three of the world’s leading producers of tin. Iron ore is excavated in Malaysia and the Philippines. Manganese, used to strengthen steel, is mined in the Philippines and Indonesia. Tungsten, used for electrical materials and in steel alloys, is found in Myanmar and Thailand.

The economies of Southeast Asia also benefit from oil extraction. Malaysia is rich in petroleum and natural gas reserves. Crude oil, natural gas, and petroleum products account for 95 percent of the export income of Brunei (bru•NY). This small country also has one of the world’s largest natural gas plants. Indonesia, the largest producer of petroleum in the region, is one of the top ten producers in the Organization of Petroleum Exporting Countries (OPEC). Economic development in the Indonesian-owned western part of New Guinea and on the Indonesian islands of Sumatra, Java, and Borneo has been spurred by the building of pipelines. These pipelines carry oil from drilling sites to the coasts for shipping.

Economics

Irian Jaya’s Resources

Indonesia’s government has set aside large areas of Irian Jaya for resource development. Located on the western half of New Guinea, Irian Jaya has timber resources and rich lodes, or deposits of minerals. Many international companies are logging in mangrove swamps in Irian Jaya and surveying for gold, natural gas, oil, and uranium elsewhere.

Although Irian Jaya is rich in minerals, many of its people are poor. Groups favoring independence claim that the Indonesian government has allowed foreigners to extract resources but has invested little in improving health, education, and public services.

Industry

Industry is growing rapidly in Southeast Asia. In many places, workers are leaving farms to work
in urban manufacturing and service industries. Still, the industrial growth rate varies widely throughout the region. While Laos and Cambodia are mainly agricultural, Singapore, Malaysia, Thailand, and the Philippines are Southeast Asia’s major industrializing countries. A center of world trade, Singapore focuses on producing goods for export. Factories in Malaysia, the Philippines, Indonesia, and Thailand manufacture textiles, clothing, and automobiles.

During the 1980s and early 1990s, the industrializing countries of Southeast Asia enjoyed an economic boom. This prosperity was based on plentiful natural resources, an abundant supply of inexpensive labor, and increased foreign investment. Massive debts, political corruption, and financial mismanagement, however, led to an economic crisis in the region in late 1997. Economic reforms allowed Thailand to emerge fairly quickly from the crisis. Since the crisis, both Thailand and the Philippines have had to balance industrial growth with investment in traditional economic activities such as agriculture and fish farming.

### Terraced Farming

Terraced Farming In hilly areas such as in Irian Jaya, terracing makes steep and rugged land suitable for agriculture.

### Human-Environment Interaction

In addition to farmland, what other resources are found in Irian Jaya?

### Economics

#### Singapore and Malaysia

Singapore has Southeast Asia’s most developed economy. Its location and harbors make it a major port and manufacturing center. In addition, Singapore’s government and businesses have carried out several policies that have led to strong economic growth. After independence in 1965, Singapore set up free-trade zones that attracted foreign investment. More recently, businesses have focused on developing communications, information, and financial services—activities less dependent on foreign investment. Singapore’s economy also has moved away from labor-intensive industries, such as textiles, into electronics and oil refining. To ensure a supply of skilled workers for these industries, the government has made a strong commitment to education.

Singapore’s neighbor, Malaysia, also has diversified, or increased its economic activities. Although Malaysia remains a major producer of natural rubber and palm oil, it now also manufactures a variety of goods, such as electronic and electrical products, cement, chemicals, and processed foods. The country also has developed heavy industries, such as steelmaking and automobile assembly. These manufactured products—along with natural rubber and palm oil—account for most of Malaysia’s export earnings. Malaysia is also the world’s largest exporter of microchips, making it an important center for information technology.

#### Less Industrialized Countries

Since the late 1990s, political instability and a rapidly growing population have slowed economic growth in Indonesia. The country supplies raw materials for world markets and is a major exporter of textiles and garments. Its labor force, however, currently lacks the technical skills and knowledge required for industrialization. Therefore, Indonesia depends heavily on foreign aid and investment to develop its industries.

Industrialization in other Southeast Asian countries, such as Laos, Vietnam, Cambodia, and Myanmar, is developing even more slowly than in Indonesia. Wars and political changes slowed economic growth in Laos, Vietnam, and Cambodia for many years. Landlocked and without ocean harbors, Laos remains largely agricultural. However,
the attempt by its communist leaders to collectivize farming reduced incentives for farmers to produce. The country is rich in mineral resources but lacks up-to-date mining technology. Laos’s future economic growth may depend on its rivers, which could provide hydroelectric power for the region.

Rapid population growth and inadequate transportation have hurt Vietnam’s economic development. The country, however, has a large potential workforce in its literate population. Another possible boost to Vietnam’s economy is its beautiful coastline, which is well suited to the development of tourism. Cambodia’s economy suffers from outdated factories and the lack of a trained, experienced workforce. Myanmar’s self-imposed isolation from world markets has long slowed its economic growth. Myanmar’s gross national product per person is one of the lowest in the world, and manufacturing accounts for just one-tenth of the country’s gross domestic product.

**Interdependence**

In recent years Southeast Asian countries have become more interdependent, or reliant on one another. As they draw closer together, economic and political developments in one country can affect other countries in the region. Two organizations formed to promote regional development, trade, and greater economic stability reflect this increasing interdependence. They are the Asian Development Bank (ADB) and the **Association of Southeast Asian Nations (ASEAN)**.

The ADB, based in the Philippines’s capital of **Manila**, provides international loans to aid the economies of Asian member countries. In Southeast Asia these ADB loans support agricultural, transportation, and industrial development projects.

Indonesia, Malaysia, the Philippines, Singapore, and Thailand formed ASEAN in 1967 as an economic and political alliance. Brunei joined in 1984, and Vietnam, Cambodia, Laos, and Myanmar all became members by the late 1990s. ASEAN’s main goals are to promote economic growth and to encourage cultural exchanges among member countries. ASEAN also provides an outlet for cooperation in a region that has long known economic and political conflict, although full political or economic unity is not its main focus.

ASEAN’s founding members generally have had greater economic success than have other countries in Southeast Asia. Development has been slow or nonexistent in countries that joined ASEAN later and also in East Timor, which has not yet joined. ASEAN member countries try to balance diverse national goals while struggling
for regional unity. In 1992 they agreed to establish a free-trade area and to reduce tariffs on nonagricultural products by 2008.

**Transportation**

Southeast Asia’s peninsulas, islands, long coastlines, and many rivers make water transportation the most common way to move people and goods in the region. However, rain-swollen rivers in the tropical forests sometimes make travel slow and difficult. In some remote areas, such as Indonesia’s territory of Irian Jaya, people receive supplies by air as well as by water.

Southeast Asia has long been the crossroads of major ocean trade routes. Today most shipping between Europe and East Asia passes through the Strait of Malacca, near Singapore. This transportation “choke point,” or strategic location, enables Singapore to prosper as a free port, a place where goods can be unloaded, stored, and reshipped free of import duties. Other regional ports include the Indonesian cities of Palembang, on Sumatra, and the national capital, Jakarta, on Java. Manila, in the Philippines, is a major center for maritime trade in Asia. Vietnam’s major international shipping port is Ho Chi Minh City.

Throughout Southeast Asia the quality of land transportation varies widely, partly because of differences in economic development. For example, Cambodia’s original highway network was designed by French planners to link agricultural areas to the port of Saigon (now Ho Chi Minh City, Vietnam). Although the network no longer serves Cambodia’s economic needs, the country lacks the resources to dramatically redesign the system. In contrast, the industrializing countries of Malaysia, Singapore, and Thailand, with their more successful economies, are able to fund improvements to roads.

Highways and railroads on Southeast Asia’s peninsulas and larger islands generally link only major cities. Many people travel on bicycles, motor scooters, and oxcarts. In urban centers such as Jakarta, Indonesia, and Bangkok, Thailand, paved roads are also choked with trucks, automobiles, motorcycles, and buses.
In most parts of rural Southeast Asia, travel is difficult because of dense forests, rugged terrain, and the seas that separate the region’s islands. Outside major urban areas, unpaved roads are often impassable during heavy rains.

**Communications**

As with transportation, communications in Southeast Asia depend on a country’s level of industrialization. Singapore’s largely prosperous and urbanized population has a well-developed communications system. Rural dwellers in parts of Cambodia and Laos, however, have little access to newspapers, television, or the Internet.

In Southeast Asia’s cities, good communications services help advance economic growth. The Internet and wireless communication have also benefited Southeast Asian commerce. Partly because of the region’s rugged terrain, telecommunications service remains poor in rural areas. Satellite communication, however, is improving television and telephone transmissions.

Post offices, newspapers, books, and magazines are located in major urban centers such as Bangkok, Jakarta, Kuala Lumpur, and Singapore. Governments typically own and control radio stations and television networks. Most people own or have access to a radio, but television sets are less common. Singapore, Brunei, and the Philippines have the greatest number of television sets per person.

Although most of Southeast Asia’s countries are developing modern communications systems, it will take time for effective communications to reach every part of the region.
People and Their Environment

A Geographic View

Traffic Ballet

Nikorn Phasuk, a Bangkok policeman who is also known as Plastic Man, steps onto a stage of asphalt under the glare of a blazing sun. He crouches, then retreats with mincing footwork as he coaxes vehicles toward him with fluid arm gestures, part of an artful ballet he uses to keep traffic rolling, no small feat in the city that may have the most congested streets in the world.


In the heart of Bangkok, Thailand’s capital, you can experience noisy, crowded, traffic-choked streets and intense heat rising from sunbaked pavement. Like other places in Southeast Asia, Bangkok faces a variety of environmental challenges. In this section you will learn about the natural and human factors that affect Southeast Asia’s environment. You will also learn about the efforts of governments and citizens’ groups to protect it.

Nature’s Might

As you learned in Chapter 29, much of Southeast Asia is part of the Ring of Fire, the area of earthquake and volcanic activity that rims the Pacific Ocean. Residents of places along the Ring of Fire periodically face volcanic eruptions, flash floods, and typhoons. These natural disasters take their toll on human lives and on economic development. People’s efforts to cope with the effects of disasters are part of everyday life in many parts of Southeast Asia.
Volcanoes

Volcanic mountains rise on most of the larger islands in the Philippines. Several of the volcanoes are active, and many Filipinos must cope with the constant threat of volcanic activity. In February 2000, thousands fled their homes as the Mayon Volcano, which had last erupted in 1993, spewed ash and lava over the landscape.

Another Philippine volcano, the 5,770-foot (1,759-m) Mount Pinatubo, erupted in June 1991. Scientists in the Philippines predicted the eruption, and government authorities ordered the evacuation of nearby towns. Still, the eruption killed more than 900 people and destroyed about 100,000 homes. Clouds of ash and dust blown into the atmosphere affected weather patterns worldwide.

... Mount Pinatubo ... spewed 15 million tons of ash, rock, and sulfuric acid 22 miles into the stratosphere. Within three weeks, the debris had veiled the globe, reflecting sunlight back into space and chilling that year's winter by at least a full degree..."


Volcanoes also figure prominently in the culture of some Southeast Asian countries. For example, the Indonesian island of Bali (BAH•lee) is famous for a volcano that reaches 10,308 feet (3,142 m) high—Gunung Agung. The Balinese people regard the volcano as the sacred centerpiece of their Hindu faith, and they leave offerings of food and flowers on the crater’s rim. Despite a 1993 eruption that took more than 1,500 lives, many Balinese still live near Gunung Agung, risking their lives and property.

Floods and Typhoons

Flash floods in Southeast Asia kill hundreds of people a year and ruin about 10 million acres (4 million ha) of crops. Human activity often magnifies the effects of these floods. In 1991 and 1995, for example, major storms struck the Philippines. Because so much land had been cleared of forest, the storms caused widespread runoff and mudslides.

The rivers of mainland Southeast Asia undergo seasonal flooding every year. Flooding poses a particular threat to Bangkok, which is built on unstable land. Some sections of the city sink as much as 25 inches (64 cm) each year. The city’s most recent serious flooding occurred in 1983, when one-fourth of its area was under water.

Tropical storms also often strike various parts of Southeast Asia. A cyclone is an area of low
atmospheric pressure surrounded by circulating winds extending out from 100 to 1,000 miles (161 to 1,609 km). Tropical cyclones are particularly deadly storms. A typhoon is a tropical cyclone that forms in the Pacific Ocean 8° to 15° N of the Equator, often between July and November. Typhoon winds circulate in a counterclockwise direction.

Southeast Asia’s typhoons form in the western Pacific Ocean, north of the island of New Guinea. Some travel north to Japan, while others move through the northern islands of the Philippines and then on to the Chinese mainland. Still others pass through the Philippines and reach Vietnam. Typhoons may have winds from 150 to 180 miles per hour (241 to 290 km per hour) and may be accompanied by rain, thunder, lightning, and high ocean waves that disrupt shipping.

Southeast Asians are taking steps to control the damage from typhoons. In Thailand, for example, planners in Bangkok are building dams to prevent typhoon-related flooding.

Environmental Pollution

Whether facing the commotion of a busy city, coaxing a modest crop from a small family plot, or taming a river’s floodwaters to protect a cash crop, Southeast Asians, like people everywhere, affect their environments. In the face of technological advances and widespread air, water, and noise pollutants, Southeast Asia’s people today try to balance environmental concerns with economic needs.

Cities

Increased prosperity in Southeast Asia has raised people’s expectations about their quality of life. Economic growth, however, also depletes limited environmental resources. Increased manufacturing, for example, raises standards of living but also creates industrial waste. As societies become wealthier and more people buy automobiles, exhaust systems send toxic fumes into the air.

Growing populations and crowded conditions in cities such as Bangkok, Manila, and Jakarta raise concerns about adequate housing, water supplies, sanitation, and traffic control. Bangkok, for example, is a busy city of skyscrapers, factories, noisy expressways, and traffic jams. Dramatic population increases and industrialization even appear to be overheating Bangkok. In recent years, the city’s heat, humidity, and pollution levels have increased at a rate higher than the global average. Higher
temperatures affect both humans and their environment, causing health problems and trapping pollutants in the air that contribute to acid rain.

Because of strict law enforcement, Singapore is an exception in a region of polluted cities. One observer describes Singapore as a “world of almost surrealistic cleanliness and good behavior, prompted on every public wall by slogans of a watchful state.” In Singapore, littering the sidewalk can bring a $250 fine.

**Rural Areas**

In some parts of Southeast Asia, pollution extends into the countryside, including the region’s national parks. In Thailand’s Tai Phi National Park, for example, 80 percent of the freshwater wells are contaminated as a result of poor waste disposal. The dumping of toxic wastes has created problems in other countries of Southeast Asia. In 1998, thousands of people in rural Cambodia fled their homes after finding out that tons of toxic materials, mislabeled as cement, had been dumped nearby. The waste, containing poisonous mercury, threatened their water supplies.

Volcanic eruptions and forest fires also pollute in rural areas, sometimes affecting cities as well. Forest fires on several islands of Indonesia in the 1990s, for example, created pollution and respiratory problems for people as far away as mainland Malaysia (see chart below). The smoke disrupted air traffic and shipping across the region.

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**CHART STUDY**

**Southeast Asia’s Burning Forests**

**Causes**

- Timber industry cuts down trees for lumber.
- Plantations clear land for commercial farming.
- Individuals clear land for subsistence farming.
- El Niño brings unusually dry conditions.

**Effects**

- Ecosystems are destroyed and animals are displaced from their natural habitats.
- Smoke from burning forests creates air pollution/smog.
- Respiratory and other diseases are caused by polluted air/smog.
- Tourism has declined as a result of the smoky atmosphere.

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**Geography Skills for Life**

1. **Interpreting Charts** What factors have caused the burning of forests in Southeast Asia?

2. **Applying Geography Skills** How might the outbreak of fires affect political and social conditions in the region? Give examples.
Logging, Farming, and Mining

In Southeast Asia, some logging, farming, and mining practices have harmed the environment. The destruction of habitats and the demand for certain food items also endanger the region’s wildlife.

Economies

Deforestation

Deforestation is a major concern throughout Southeast Asia. In Laos, Thailand, and Myanmar, teak and other timber provides important sources of income. Since the 1960s, commercial logging companies have set up modern logging processes and provided training and jobs for many Southeast Asians. The region’s economies have benefited, but the widespread cutting of trees has steadily diminished the region’s forests. Until recently, companies made few efforts to replant as they harvested. Without the trees’ root systems, topsoil is no longer held in place. Heavy tropical rains easily erode topsoil, washing it into streams that crisscross the region. The topsoil clogs rivers and reduces the amount of water available for irrigation.

Excessive logging also has caused major flooding. Without forests to absorb downpours, flash floods on bare, muddy slopes have swept into valleys, killing hundreds of people and leaving thousands more injured and homeless.

Some farming methods contribute to deforestation and soil erosion. Throughout Southeast Asia, farmers carry out slash-and-burn agriculture—cutting down vegetation, burning it, and using the ashes for fertilizer. In highlands areas, farmers grow food crops by a method known as shifting cultivation, clearing forests to plant fields, cultivating the land for a few years, and then abandoning it. They then repeat the process in a new area.

Fires also have destroyed forested areas. Plantation owners in Southeast Asia often burn large areas of land in order to plant profitable cash crops. These fires are becoming more frequent, and they often destroy large areas of forests when, during periods of drought, they blaze out of control.

Mining

The mining of valuable minerals and metals has also led to environmental abuses. At Indonesia’s largest gold mine, workers dump large amounts of rock waste into the Ajkwa River in Irian Jaya. This dumping will eventually divert the river from its original course, flooding more than 50 square miles (130 sq. km) of forest and displacing many people. Pollution from the rock waste has already begun to kill vegetation in the surrounding rain forest.

Environmental Protection

In recent years, some Southeast Asian countries have taken steps to protect their environments. To prevent further loss of rain forests, Thailand, Indonesia, the Philippines, and Malaysia have limited certain timber exports and have introduced reforestation programs. Such efforts, however, have proved difficult to enforce or carry out, and illegal logging is still taking its toll on the region’s forests. Scientists predict that many unique environments—with their variety of plant and animal species—will be lost within a few years.

In Indonesia, for example, the government in the early 1980s introduced a plan to set aside large parts of the country as conservation areas. In recent years, however, this plan has been largely
abandoned because of the government’s grant of logging rights to timber companies and the outbreak of political turmoil.

In addition, illegal logging operations on the Indonesian islands of Sumatra and Kalimantan have destroyed much of the forests bordering national parks. Scientists visiting these areas state that the Indonesian government must enforce its own environmental laws, and the army may have to be used to stop illegal logging.

In other Southeast Asian countries, planned migration or resettlement has balanced environmental protection and economic development. Laos, for example, has tried to limit shifting cultivation by resettling highlands peoples on more fertile and arable plains.

Southeast Asian governments also are starting to deal with the impact of urban growth on the environment. Bangkok, Thailand, for example, is a major example of urban warming, caused by industrialization, crowded living and working areas, and the increased use of automobiles and other vehicles. To handle this problem, scientists have proposed several solutions. One includes the creation of “green zones,” or areas within a city that are granted special environmental protection. Another suggests banning the construction of tall buildings near the sea, allowing winds to blow farther into the city and provide more ventilation. Despite enormous challenges, these and other proposals are helping Southeast Asians realize that they must work hard to protect the environment while developing their economies.
Southeast Asia’s Reefs:

Like underwater cities, coral reefs swarm with life in the warm, shallow oceans banding the Equator. Home to a fourth of all known marine species, coral reefs rival tropical rain forests in biodiversity. Like rain forests, too, coral reefs are at risk worldwide. Nowhere are these fragile habitats in more danger than in Southeast Asia, where local people use poisons and explosives to capture certain kinds of fish. These fish supply Asian restaurants and a worldwide aquarium industry. The trade generates huge profits for many people in the region, but their fishing methods are destroying the reefs.
Suspended in crystal clear waters, an Indonesian fisherman (left) drifts over a bamboo fish trap nestled among colorful corals. Corals look like rocks, but they are actually colonies of tiny animals called coral polyps. Each polyp secretes a limestone cup around itself, forming a limestone skeleton. The polyps attach to the skeletons of dead polyps, and the limestone formations—called coral reefs—grow larger and larger. Despite their rock-hard appearance, however, coral reefs are easily damaged. Worldwide, reefs are dying because of pollution, overfishing, coastal development, diseases, and rising ocean temperatures.

The reefs of Southeast Asia are among the world’s richest—and some of the most endangered. The thriving trade in live reef fishes is largely to blame. Colorful tropical fish captured on coral reefs end up in collectors’ aquariums. Fashionable restaurants in Hong Kong, Taiwan, and China are also to blame. Diners there pay big money to select live reef fish from a tank, and then have them killed, cooked, and served on the spot.

To capture fish alive, many Southeast Asian fishers use dynamite to stun fish—a technique called blast fishing. In addition, fishers squirt fish with cyanide. The poison temporarily immobilizes a fish, making it easy to catch. Explosives and cyanide, however, kill countless other fish and ocean creatures, including corals. Scientists estimate that 50 percent of Indonesian reefs and 80 percent of Philippine reefs are turning into aquatic graveyards.

Environmentalists claim that the use of explosives and cyanide to capture live reef fish is destroying entire coral reef ecosystems. Scientists warn that the loss of coral reefs will harm other ocean food chains, which could affect oceans worldwide. Concerned officials point out that once the reefs are gone, local communities will lose a primary source of food and a lucrative tourist industry.

Fishers working in the live reef-fish trade see it as an opportunity to raise their standard of living. Cyanide fishers often earn three times the salary of college-educated workers in the region. Some fishers claim that if they don’t catch the reef fish now in demand, others will. Local people point out that Southeast Asia’s coral reefs belong to Southeast Asian countries and that decisions about how to use their reef resources should be made by people living in the region.

What’s Your Point of View?
Should people around the world be concerned about Southeast Asia’s coral reefs? What might be done to restrict trade in live reef fish?
Drawing Conclusions

Drawing conclusions involves studying facts and details to understand how they are related and what they mean. By putting this information together, you can better understand an action or event.

Learning the Skill

When you draw a conclusion, you use facts, observation, and experience to form a judgment about an event. Drawing conclusions allows you to understand indirectly stated ideas and events, so you can apply your knowledge to similar situations.

Sometimes, however, people draw incorrect conclusions based on the information they have. Often the facts and details of a situation could logically lead to more than one conclusion. For example, if you see someone sweating, you might conclude that the person has been exercising. You might also conclude that this person may be sick with a fever. To determine which conclusion is correct, you would need to obtain and evaluate further information. To determine the accuracy of any conclusion, it is important to gather information that will prove or disprove it.

Follow these steps when drawing conclusions:

- Review the facts that are stated directly.
- Use your own knowledge, experience, and insight to form conclusions about the facts.
- Find information that would help prove or disprove your conclusions.

Practicing the Skill

Read the excerpt above about traveling with the Penan people of Malaysia, and answer the following questions.

1. What important facts does the author include?
2. What information does Tu’o’s morning prayer provide about his attitude toward the forest?
3. What conclusion can you draw about the Penan people based on this author’s description?
4. What evidence do you have to support this conclusion?

Applied the Skill

Bring to class an article from a magazine, newspaper, or Internet source describing a current conflict in Southeast Asia. Using the steps on this page, draw conclusions about the causes of the conflict and its likely outcome. Summarize your conclusions in a paragraph.

The Glencoe Skillbuilder Interactive Workbook, Level 2 provides instruction and practice in key social studies skills.
SECTION 1

Living in Southeast Asia (pp. 759–765)

Terms to Know
• paddy
• sickle
• subsistence crop
• cash crop
• lode
• interdependent
• Association of Southeast Asian Nations (ASEAN)
• free port

Key Points
• Agriculture is the leading economic activity in Southeast Asia.
• The countries of the region are industrializing at different rates, which causes great variation in economies, occupations, transportation, and communications.
• Through ASEAN and other organizations that were formed to promote regional development and trade, the countries of Southeast Asia are becoming more interdependent.

Organizing Your Notes
Create an outline using the format below to help you organize your notes for this section.

SECTION 2

People and Their Environment (pp. 766–771)

Terms to Know
• cyclone
• typhoon
• shifting cultivation

Key Points
• Volcanic eruptions, flash floods, and typhoons have serious effects on Southeast Asians’ lives.
• Industrialization and economic development in Southeast Asia often result in the pollution of air, land, and water.
• The region’s countries are taking steps to protect the environment.

Organizing Your Notes
Use a web diagram like the one below to help you organize important details from this section.

A Thai family stands by their house, built on a canal in Bangkok.
Critical Thinking

1. Identifying Cause and Effect What effects might continued mining and logging have on Irian Jaya’s people?

2. Making Inferences How does interdependence help Southeast Asia’s economic development and trade?

3. Comparing and Constrasting Using a Venn diagram like the one below, compare the environmental challenges that occur in Southeast Asian cities and rural areas.

Reviewing Key Terms

Write the key term that best completes each of the following sentences. Refer to the Terms to Know in the Summary & Study Guide on page 775.

1. Irian Jaya has rich __________, or deposits of minerals.

2. __________ in the Philippines include coconuts and sugarcane.

3. A flooded field in which rice is grown is a __________.

4. Countries involved in oceangoing trade are attracted by a(n) __________ such as Singapore.

5. By becoming __________, the countries of Southeast Asia can build the region’s economy.

6. Indonesia, Malaysia, the Philippines, Singapore, and Thailand were the first countries to join the __________.

7. Southeast Asia experiences a specific kind of __________ known as a typhoon.

8. A hand tool called a(n) __________ is still used to harvest crops.

9. In __________ farmers abandon their fields after a few years.

Reviewing Facts

SECTION 1

1. What is the occupation of most people in Southeast Asia?

2. What types of industries are the countries of Southeast Asia developing?

SECTION 2


4. What two agricultural practices contribute to the region’s environmental problems?
Using the Regional Atlas

Refer to the Regional Atlas on pages 710–713.

1. **Location**  What body of water separates northern Vietnam from the South China Sea?

2. **Human-Environment Interaction**  What are the two main types of land use in mountainous areas in Southeast Asia?

**Thinking Like a Geographer**

Think about the physical geography of Southeast Asia. What is one of the region’s important physical assets? As a geographer, how might you suggest that people utilize this asset to improve their lives?

**Problem-Solving Activity**

**Group Research Project**  Work with a group to research how people in various world regions adapt to or modify their environment in order to control flooding. Compare methods of flood control in other regions with those used in Southeast Asia. Evaluate whether a method used in another region is workable in Southeast Asia.

**GeoJournal**

**Expository Writing**  Using the information you logged in your GeoJournal as you read this chapter, choose one economic or environmental characteristic of Southeast Asia. Then write a short essay that compares and contrasts the characteristic among the region’s countries. Use your textbook and the Internet as resources.

**Technology Activity**

**Creating an Electronic Database**  Make a fact sheet for each Southeast Asian country. Include data about agriculture, industries, transportation, communications, and environmental challenges. Put this information into a database, and then write a paragraph comparing and contrasting two Southeast Asian countries. If possible, create graphic elements such as bar graphs or circle graphs to support your conclusions.

**TAXS Test Practice**

Study the bar graph below. Then choose the best answer for the multiple-choice question. If you have trouble answering the question, use the process of elimination to narrow your choices.

### Media in Selected Southeast Asian Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>% Urban</th>
<th>TV sets</th>
<th>Radios</th>
<th>Newspaper circulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>100%</td>
<td>300</td>
<td>400</td>
<td>500</td>
</tr>
<tr>
<td>Philippines</td>
<td>55%</td>
<td>250</td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Myanmar</td>
<td>26%</td>
<td>150</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Laos</td>
<td>21%</td>
<td>120</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Vietnam</td>
<td>19%</td>
<td>100</td>
<td>120</td>
<td>150</td>
</tr>
</tbody>
</table>

**Source:** The World Almanac and Book of Facts, 2000

1. **What conclusions can you draw from the graph?**
   A. Newspapers are censored in Laos.
   B. People in rural areas have less access to literacy programs.
   C. Urban populations have more access to news sources.
   D. Televisions are less expensive in Singapore than in other countries in Southeast Asia.

**Test-Taking Tip**  Study the title and labels on the graph to see what information is being presented. Note the important facts, and look at the relationships among the countries. Remember, an answer choice that may be true cannot be the correct answer if there is no information to support it in the graph.