The Physical Geography of Southeast Asia
Chapter Objectives

- Describe the dominant landforms and natural resources of Southeast Asia.
- Discuss Southeast Asia’s climate and vegetation.
The Land

Section 1
Objectives

- Describe how tectonic plates and activity from volcanoes and earthquakes formed Southeast Asia.
- Explain why the region’s waterways are important to its peoples.
- Summarize how rich natural resources affect Southeast Asia’s economy.
Terms to Know

- Cordillera
- archipelago
- insular
- flora
- fauna
A Geographic View

Stilt houses in Papua
Geographic Literacy

- Although the Philippines includes over 7,000 islands, the archipelago’s total area is only 115,831 square miles (300,001 sq. km), about the size of Arizona. The islands that make up the Philippines together have a coastline that measures 22,554 miles (36,289 km). The two large islands of Luzon and Mindanao account for about 66 percent of the country’s land area.
Peninsula and Islands

- The collision of three tectonic plates millions of years ago produced the peninsulas and islands of Southeast Asia. Straddling the Equator, Southeast Asia has mountainous terrain with a predominately tropical climate.
- **Mainland Southeast Asia**  About half of Southeast Asia’s 11 countries are located on the mainland.
- Malaysia is both a mainland and an island country.
- Laos is the only landlocked country in the region.
Peninsulas and Islands
Peninsulas and Islands

- Island Southeast Asia  Southeast Asia’s island nations include Brunei, East Timor, Indonesia, Singapore, and the Philippines.
- Indonesia—the largest island country in the region—is made up of more than 13,500 islands that span 3,000 miles (4,827 km) and two oceans, the Indian and the Pacific.
- Singapore consists of one large island and 50 smaller ones.
- The Philippines is made up of more than 7,000 islands, 11 of which are home to 95 percent of the population.
Physical Features

- **Mountains** Southeast Asia’s many mountains create geographical and political boundaries. Some of them are active volcanoes, forming part of the Ring of Fire.
- Over time, mineral-rich volcanic material has broken down to provide farmers with rich, fertile soil.
- **Volcanoes of Indonesia and the Philippines** Java, an Indonesian island, is one of the Ring of Fire’s most active areas. It is home to 17 of Indonesia’s 100 active volcanoes.
- In 1883, the eruption of Krakatau (Krakatoa) in Indonesia caused massive destruction and great loss of life.
- In 1991, the Philippines’s Mount Pinatubo erupted, burying the surrounding area under a foot of mineral-rich volcanic ash.
Physical Features
Physical Features

- **Rivers**  Southeast Asians rely on waterways for transportation, communication, and food.
- Mainland rivers originate in the northern highlands and flow south toward the Gulf of Thailand.
- Major rivers include the Irrawaddy in Myanmar, the Chao Phraya in Thailand, the Red River in Vietnam, and the Mekong River, which flows through the Indochina Peninsula before emptying into the South China Sea.
- The rivers on islands are generally shorter and flow in various directions.
Physical Features
Natural Resources

- **Energy Sources**  Southeast Asia has a plentiful supply of coal, oil, and natural gas.
- Indonesia, one of the leading producers of oil, is a member of OPEC.
- Malaysia, Vietnam, the Philippines, and Brunei also have fossil fuel resources.
- **Minerals and Gems**  Southeast Asia has abundant mineral resources.
- Indonesia mines nickel and iron, and copper is mined in the Philippines.
- Other countries in the region, especially Malaysia, mine tin.
- Sapphires, rubies, and pearls are also found in large quantities in Southeast Asia.
Natural Resources

- Myanmar has substantial deposits of minerals and gems, but mining employs less than 1 percent of Myanmar’s workers.
- **Flora and Fauna** A vast array of flowers and plants contributes to the region’s economy.
- Thailand is one of the world’s leading exporters of orchids.
- Malaysia is a source of much of the world’s rubber, and Indonesia is the world’s largest supplier of plywood.
- Southeast Asia has a wide variety of animals including elephants, rhinoceroses, tigers, and orangutans.
- Animals exclusive to the region include the Komodo dragon, an Indonesian lizard, and the bearded pig.
Natural Resources

- **Fishing**  More than 2,500 species of fish swim the tropical waters of Southeast Asia.
- Southeast Asians consume seafood at almost twice the world’s average rate.
- Fish farming is important to local economies.
- Concern about overfishing has risen because local fishers must now compete with large fleets of trawlers.
Climate and Vegetation

Section 2
Objectives

- Identify the weather pattern that influences Southeast Asia’s climate.
- List the region’s main climate types.
- State the main type of natural vegetation found in Southeast Asia.
Terms to Know

- Endemic
- Deciduous
A Geographic View

Malaysian rain forest
Geographic Literacy

- Malaysia includes mainland and island areas: West Malaysia, primarily on the southern part of the Malay Peninsula, and East Malaysia, on the northern part of the island of Borneo. Both areas, however, have similar natural features: coastal swamps or mangrove forests, lowland rain forests, and interior mountains.
Tropical Climate Regions

- Southeast Asia’s rain forests depend on the moisture brought by the summer monsoons blowing in from the south and west.
- **Tropical Rain Forest Climate**
  - Most of Southeast Asia has a tropical rain forest climate.
  - Temperatures are fairly constant, averaging 79°F (26°C).
  - Humidity is always high, and annual rainfall is between 79 and 188 inches (201 and 478 cm).
  - The rain forests feature more than 145,000 species of flowering plants.
  - Other types of vegetation include peat swamp forests, mangrove swamp forests, and evergreen trees.
Tropical Climate Regions

- **Singapore**  Singapore, once covered by dense rain forest, is now almost entirely urbanized.

- Nearly 80 percent of the trees now growing there are imported, some originating from such distant places as Central and South America.

- **Tropical Savanna Climate**  Parts of the Indochina Peninsula and the islands of Indonesia have a tropical savanna climate, with alternating wet and dry seasons and tree-covered grasslands.

- The dry season may last from four to eight months per year.
Tropical Climate Regions
Tropical Climate Regions

- **Humid Subtropical Climate**  Northern Myanmar and Vietnam, most of Laos, and part of Thailand have a humid subtropical climate, with a cool dry season lasting from November to April.
Highland Climate Region

- Highlands climates predominate in mountainous areas of Myanmar, New Guinea, and Borneo.
- Temperatures are cooler here.
Highlands Climate Region
Section 1 – Summary

• Mountains and rivers dominate the region’s landscape. The island mountains are part of the Pacific Ring of Fire.
• Rivers on the mainland of Southeast Asia are important for agriculture, communication, and transportation.
• Southeast Asia contains abundant natural resources, including fossil fuels, natural steam, minerals, and gems.
Monsoons cause two main seasons in Southeast Asia, one wet and one dry.

Southeast Asia’s major climate is tropical rain forest, although parts of the mainland and some of the islands have other types of climate.

Humid subtropical climates predominate in Laos and in northern areas of Myanmar, Thailand, and Vietnam.

Highlands climates are found in the mountains of Myanmar, Borneo, and New Guinea.