Lesson 1: Physical Geography of East Asia

ESSENTIAL QUESTION
How does geography influence the way people live?

Terms to Know

de facto  actually; in reality
archipelago  a group of islands
tsunami  a giant ocean wave caused by an earthquake under the ocean floor
loess  a fine-grained, fertile soil deposited by the wind

Where in the World: East Asia

[Map of East Asia showing countries and cities like Tokyo, Beijing, Shanghai, and Seoul.]

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Reading Essentials and Study Guide
East Asia

Lesson 1: Physical Geography of East Asia, continued

Landforms and Waterways

Guiding Question  What are the main physical features and physical processes in East Asia?

East Asia is made up of six countries: China, Japan, Mongolia, North Korea, South Korea, and the de facto country of Taiwan. A de facto country is one that is not legally recognized. The region’s largest country, China, is the world’s fourth-largest country in land area.

Mainland East Asia, which includes China and Mongolia, can be divided into three subregions like steps. The highest step is the Plateau of Tibet. Much of it is more than 2.5 miles (4 km) above sea level. High mountains circle the plateau of Tibet. The Kunlun Shan range is on the north. On the south are the Himalaya, the tallest mountains in the world.

The middle step is north and east of Tibet and has lower mountains and plateaus. Much of the land to the north is desert or near desert. Land along the southern part is forested. There are deep canyons where the land descends from Tibet.

Low hills and plains form the third and lowest step, which covers most of the eastern third of China. Most Chinese people live on these plains.

In addition to the mainland, East Asia includes a large peninsula between the Yellow Sea and the Sea of Japan (East Sea). It is home to two countries, North Korea and South Korea. The peninsula is mountainous in the northeast. In the south and west, broad plains stretch between the mountains and the coast.

Japan is an archipelago, or chain of islands, along the eastern edge of the Sea of Japan. It is roughly 1,500 miles (2,414 km) long, and consists of four large islands and thousands of smaller ones. The islands of Japan are part of the Ring of Fire, which nearly encircles the Pacific Ocean. The islands were formed by volcanic eruptions millions of years ago. Mount Fuji, a beautiful, cone-shaped volcano, is a well-known symbol of Japan.

Japan is one of the most earthquake-prone countries in the world. When an earthquake occurs below or close to the ocean, it can cause a tsunami. This is a huge wave that gets higher as it approaches the coast. Tsunamis can wipe out coastal cities and towns.

Hundreds of miles southwest of Japan’s main islands lies another large island, Taiwan. Like Japan, it was formed by volcanic activity. Mountains stretch the length of the island. On the western side of the island there is a gentler slope than on the steep eastern side. Broad plains spread across the western part of the island.
Four seas sit along the eastern edge of East Asia. The South China Sea lies between southeastern China and Taiwan. The East China Sea lies between China and Japan. In the north, it meets the Yellow Sea, which is shaped by the Korean Peninsula and the northeastern coast of China. Farther north, Japan, the Korean Peninsula, and the Asian mainland nearly surround the Sea of Japan (East Sea).

East Asia's two most important rivers are the Huang He (Yellow River) and the Chang Jiang (Yangtze River). The Huang He gets its name from yellow-brown silt called loess. Silt deposited by floods has created a broad, fertile plain that has some of China's best farmland. These floods have also caused much damage and loss of life. The Chang Jiang is the longest river in Asia and China's principal waterway. It also provides water for rice farming.

Japan’s major rivers are short, steep, and swift. Most of them generate hydroelectric power. The main rivers of the Korean Peninsula flow from inland mountains toward the Yellow Sea. North Korea's longest river, the Yalu, forms the country's border with China.

Climate

Guiding Question  What are the main factors that affect climate in different parts of East Asia?

Climates in East Asia vary greatly because of several factors:

- Latitude: The region spans a great distance from north to south.
- Elevation: Two areas at the same latitude can have very different climates if one is higher than the other.
- Air masses: Cold, dry, polar air spreads from northern Asia in colder months. Warm, moist, tropical air spreads northward and eastward from the Pacific Ocean in warmer months.

Southeastern China is hot and rainy much of the year, with lush vegetation. To the north, there is more seasonal variation. Taiwan, Japan, and the Korean Peninsula are generally wetter and have milder temperatures than mainland areas at the same latitudes.

The climate in Mongolia and north-central and northwestern China is dry. Winters are bitterly cold. This region includes the Gobi Desert and the Taklimakan desert, as well as treeless grasslands.

The Plateau of Tibet in southwestern China also has a dry climate. The Himalaya block moist air flowing northward from the Indian Ocean. Because of the elevation, the plateau is cold and windy throughout the year.
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Lesson 1: Physical Geography of East Asia, continued

Natural Resources
Guiding Question  What mineral resources are most abundant in East Asia?

China holds the greatest share of the region’s resources. Japan is one of the world’s leading industrial countries, but has few mineral resources. It must import many raw materials. Taiwan, another major industrial country, also has limited resources and must import minerals to meet demand.

<table>
<thead>
<tr>
<th>Mineral Resources in East Asia</th>
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<tbody>
<tr>
<td>China</td>
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<tr>
<td>Japan</td>
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The largest deposits of fossil fuels are in China. China is the world’s largest producer of coal. It also has large oil and natural gas reserves under the South China Sea and in the Taklimakan desert in the far west. Despite these resources, China still cannot meet all of the energy needs of its growing economy. Both China and Japan use hydroelectric dams to produce electricity.

Eastern China was once covered by forests, but people cut trees down for heating, building, and to create farmland. Today, forests cover less than one-sixth of the country. More than half of Taiwan is covered in forests. However, much of the forested land is protected, so Taiwan must import wood. Almost two-thirds of Japan is forested. Logging is limited because the Japanese consider many forest areas to be sacred. In the Korean Peninsula, many trees have been cleared for farmland. About three-fourths of North Korea is forested.

Writing
Check for Understanding
1. Informative/Explanatory Summarize the way mineral resources are distributed among the countries of East Asia.

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Marking the Text
10. Read the text on the left. Highlight the names of two major industrial countries in East Asia that must import most of their raw materials.

Reading Progress Check
11. Why is it necessary for people in Taiwan and Japan to import wood products?

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