**IT MATTERS BECAUSE** **Brazil is the world’s fifth-largest country in size and population.**

**Waterways and Landforms**

Guiding Question ***What are Brazil’s physical features?***

Brazil is the largest country in South America. It occupies about half the continent. Rolling lowland plains and flat highland plateaus cover most of the country.

**The Amazon**

The Amazon River is one of Brazil’s amazing natural features as well as a great natural resource. Locate this vast river system on the physical map of South America in the Unit Region Atlas. You notice that the Amazon begins high in the Andes of Peru and flows east across northern Brazil to the Atlantic Ocean. The river is the Western Hemisphere’s longest river and the world’s second longest, after the Nile River in Africa.

The Amazon is the largest river in terms of the amount of freshwater it carries. It moves more than 10 times the water volume of the Mississippi River. Of all the water that Earth’s rivers empty into the oceans, about 25 percent comes from the Amazon. Its massive flow pushes freshwater more than 100 miles (161 km) out into the Atlantic Ocean. The river’s depth allows oceangoing ships to travel more than 2,000 miles (3,219 km) upstream to unload or pick up cargo.

**The Amazon Basin**

One reason the Amazon carries so much water is that it has more than 1,000 tributaries. These smaller rivers feed into the Amazon as it flows from the Andes to the Atlantic Ocean. Several tributaries are more than 1,000 miles (1,609 km) long.

The area that a river and its tributaries drain is called a basin. The Amazon Basin covers more than 2 million square miles (5.2 million sq. km). Nearly half of Brazil’s land lies within this vast region. Its wet lowlands cover most of the country’s northern and western areas.

Much of the Amazon Basin is covered by the world’s largest rain forest. A rain forest is a warm woodland that receives a great deal of rain each year. Tall evergreen trees form a canopy, or an umbrella-like covering. The Amazon rain forest is called the Selva. It is the world’s richest biological resource. The Selva is home to several million kinds of plants, insects, birds, and other animals.

Only about 6 percent of Brazil’s population lives in the Amazon Basin. Most of the region contains fewer than two people per square mile. Some are Native Americans who live in small villages and have little contact with the outside world. Their cultures have been relatively unchanged for centuries.

**Brazilian Highlands**

South and east of the Amazon Basin are the Brazilian Highlands. This is mainly a region of rolling hills and areas of high, flat land called plateaus. These highlands are divided into western and eastern parts.

The western part of the highlands is largely grassland that is partly covered with shrubs and small trees. Farming and ranching are the major economic activities in this part of the highlands. Farther west is the Mato Grosso Plateau, a flat, sparsely populated area of forests and grasslands that extends into Bolivia and Peru.

Low mountain ranges form much of the eastern Brazilian Highlands, although some peaks rise above 7,000 feet (2,134 m). In other places, highland plateaus plunge to the Atlantic coast, forming escarpments, or steep slopes. These escarpments, rising from coast to highlands, have hindered development of inland areas.

Brazil’s third-largest city, Brasília, is located in the Brazilian Highlands. It was built in the 1950s as Brazil’s new capital to encourage settlement in the country’s interior. Some 3.5 million people live in and around the city.

About 600 miles (966 km) south of Brasília is São Paulo. This huge city is located on a plateau at the highland’s eastern edge, just 30 miles (48 km) from the Atlantic coast. With more than 17 million people, São Paulo is the largest city in the Southern Hemisphere. It is also South America’s most important industrial city.

Farther south are grassy, treeless plains called pampas. The grass and fertile soil make the pampas one of Brazil’s most productive ranching and farming areas.

**Atlantic Lowlands**

Brazil has one of the longest strips of coastal plains in South America, wedged between the Brazilian Highlands and the Atlantic Ocean. This narrow plains region, called the Atlantic lowlands, is just 125 miles (201 km) wide in the north; it becomes even narrower in the southeast. The rural parts of this region are another important area for farming.

Although the coastal lowlands cover only a small part of Brazil’s territory, most of the nation’s people live here. More than 12 million live in and around Rio de Janeiro, Brazil’s second-largest city. Rio’s beautiful beaches and vibrant lifestyle make it Brazil’s cultural and tourist center.

**A Tropical Climate**

Guiding Question ***What are Brazil’s climate and weather like?***

Most of Brazil is located in the Tropics. This is the zone along Earth’s Equator that lies between the Tropic of Cancer and the Tropic of Capricorn. Brazil’s climate varies. In fact, the huge country has several different climates.

**Wet Rain Forests**

The area along the Equator in northern Brazil has a tropical rain forest climate. In this climate, every day is warm and wet. Daytime temperatures average in the 80s° Fahrenheit (27°C to 32°C). Temperatures feel hotter than this because the wet rain forest makes the air humid.

Areas along the Amazon River have a tropical rain forest climate. They experience winds called monsoons that bring a huge amount of rain—120 inches to 140 inches (305 cm to 356 cm) per year. During the monsoon season, flooding swells the Amazon River in some places to more than 100 miles (161 km) wide. These areas also have a dry season when little rain occurs. During the dry season, forest fires are a danger, even in a rain forest.

**Tropical Wet/Dry Climate**

Tropical wet/dry climates usually exist along the outer edges of tropical rain forest climates. Most of the northern and central Brazilian Highlands has a tropical wet/dry climate. This climate has just two seasons—summer, which is wet, and winter, which is dry. Daily average temperatures change very little. Summers average in the 70°F range (21°C) and winters in the 60°F range (16°C). But even this slight difference is enough to change wind patterns, which affect rainfall. During the summer months, between 40 inches and 70 inches (102 cm to 178 cm) of rain fall in this area. Winters get almost no rain.

**Dry and Temperate Climates**

The northeastern part of the Brazilian Highlands has a semiarid climate. This region is the hottest and driest part of the country. The daily high temperature during the summer often reaches 100°F (38°C). Frequent and severe droughts have caused many of the region’s farms to fail. Even so, the desert like plant life supports some light ranching.

Southeastern Brazil, including São Paulo and Rio de Janeiro, is located in the temperate zone—the region between the Tropic of Capricorn and the Antarctic Circle. It has a temperate climate called humid subtropical. It is the same type of climate that the southeastern United States experiences.

Temperatures vary according to location and elevation in this part of Brazil. Summers are generally warm and humid, and winters are mild. Rainfall occurs year-round. In the southern parts of this climate zone, snow can fall

**Natural Resources**

Guiding Question: ***What resources are most plentiful and important in Brazil?***

Brazil has some of the world’s most plentiful natural resources. Many of the resources have been developed for years, especially in the south and southeast. Recent transportation improvements have made the resources in Brazil’s vast interior available to its growing industries and population. Agriculture, mining, and forestry have been important for centuries. The natural riches of Brazil attracted European settlers to the region. They found abundant trees, rich mineral resources, and fertile farmland.

**Abundant Forests**

Forests cover about 60 percent of Brazil, accounting for about 7 percent of the world’s timber resources. Most of the forests in the northeast and south were cleared long ago. Heavy logging continues in the Atlantic lowlands.

Logging in the Amazon Basin is increasing as more roads are built and settlement grows. The rain forest’s mahogany and other hardwoods are highly desirable for making furniture. The rain forest is also a source of renewable natural resources such as natural rubber, nuts, and medicinal plants. Logging, mining, and other development have become a major environmental issue. However, the rate of deforestation, or clearing land of forests or trees, has declined in recent years.

**Minerals**

Brazil has rich mineral resources that are only partly developed. They include iron ore, tin, copper, bauxite, gold, and manganese. At one time, most mining was done in the Brazilian Highlands. Recently, major deposits of minerals have been found in the Amazon Basin. The new deposits might make Brazil the world’s largest producer of many of the minerals. Brazil also has huge potential reserves of petroleum and natural gas deep under the ocean floor off its coast. Getting to the oil is a challenge, however.

**Productive Farmland**

Brazil is the world’s largest producer of coffee, sugarcane, and tropical fruits. The country also produces great amounts of soybeans, corn, and cotton.

Brazilian farmers produce most of their country’s food supply. Agriculture is also important in trade, accounting for more than one-third of Brazil’s exports. It is a leading exporter of coffee, oranges, soybeans, and cassava. Cassava is used to make tapioca.

**Major Crops**

Production of coffee throughout the world was estimated to set an all-time high in 2012–2013, up 10 million bags from the previous year. Brazil and Vietnam accounted for most of the increase. The eastern Brazilian Highlands and the Atlantic lowlands are the main coffee-growing areas. Coffee was once Brazil’s main export. Today, soybeans provide more income for the country. China is increasing its soybean imports, mostly for animal feed, and much of it comes from Brazil.

Most soybeans are grown in the south, but they are an important crop in the Brazilian Highlands, too. Farming has become easier in the highlands as farmers have begun using tractors and fertilizer to work the savanna soils.

Brazil grows one-third of the world’s oranges, making it the world’s leading supplier of the citrus fruit. Brazil is also the largest beef exporter in the world. Most of the country’s grazing land is in the south and southeast.

In a recent year, Brazil’s sugarcane production was more than two and a half times that of India, the second-leading producer. Brazilian sugarcane is used to make ethanol, which is mixed with gasoline and used as fuel for cars and trucks. For many years, the government has required cars to use ethanol. The country’s car manufacturers make flexible-fuel vehicles that can use fuel with high levels of ethanol.