Physical Geography

If YOU lived there...
You live on the coast of Brazil, near the mouth of the Amazon River. Now you are taking your first trip up the river deep into the rain forest. The river is amazingly wide and calm. Trees on the riverbanks seem to soar to the sky. Your boat slows as you pass a small village. You notice that all the houses rest on poles that lift them 8 to 10 feet out of the water.

What would it be like to live in the rain forest?

BUILDING BACKGROUND While rugged mountains and highlands dominate the landscape of Caribbean South America, much of the Atlantic region is made up of broad interior plains. Landscapes in this region range from tropical rain forest to temperate, grassy plains.

Physical Features
The region of Atlantic South America includes four countries: Brazil, Argentina, Uruguay, and Paraguay. This large region covers about two-thirds of South America. Brazil alone occupies nearly half of the continent. Most of the physical features found in South America are found in these four countries.

Major River Systems
The world’s largest river system, the Amazon, flows eastward across northern Brazil. The Amazon River is about 4,000 miles (6,440 km) long. It extends from the Andes Mountains in Peru to the Atlantic Ocean. Hundreds of tributaries flow into it, draining an area that includes parts of most South American countries.

Because of its huge drainage area, the Amazon carries more water than any other river in the world. About 20 percent of the water that runs off Earth’s surface flows down the Amazon. Where it meets the Atlantic, this freshwater lowers the salt level of the Atlantic for more than 100 miles (160 km) from shore.
The Paraná (pah-rah-NAH) River drains much of the central part of South America. Water from the Paraná River eventually flows into the **Río de la Plata** (REE-oh day lah PLAH-tah) and the Atlantic Ocean beyond. The Río de la Plata is an estuary, an estuary is a partially enclosed body of water where freshwater mixes with salty seawater.

**Plains and Plateaus**

As you can see on the map, this region’s landforms mainly consist of plains and plateaus. The Amazon Basin in northern Brazil is a giant, flat floodplain. South of the Amazon Basin are the Brazilian Highlands, a rugged region of old, eroded mountains, and another area of high plains called the Mato Grosso Plateau.

Farther south, a low plains region known as the Gran Chaco (grahm CHAH-koh) stretches across parts of Paraguay and northern Argentina. In central Argentina are the wide, grassy plains of the **Pampas**. South of the Pampas is Patagonia—a region of dry plains and plateaus. All of these southern plains rise in the west to form the high Andes Mountains.

**Focus on Reading**

*Where can you find the definition of Pampas?*

**Reading Check**

*Summarizing* What are the region’s major landforms and rivers?
The Amazon rain forest covers more than one-third of South America. Seen from the air, it looks like a big, green carpet. The top level of tree branches is called the canopy. Most action in the forest takes place in the canopy, but plenty of life also exists below.

Animals such as monkeys and sloths can spend their entire lives in the canopy.

Parts of the forest are flooded for half the year, and trees stand in water up to 40 feet (12 m) deep.

What kinds of animals could not survive living in the canopy?
Climate and Vegetation

Atlantic South America has many climates. Generally, cool climates in southern and highland areas give way to tropical, moist climates in northern and coastal areas.

In southern Argentina Patagonia has a cool, desert climate. North of Patagonia, rich soils and a humid subtropical climate make parts of the Pampas good for farming. Farther north in Argentina, the Gran Chaco has a humid tropical climate. There, summer rains can turn some parts of the plains into marshlands.

North of Argentina, in Brazil, a large part of the central region has a tropical savanna climate with warm grasslands. The northeastern part of the country has a hot, dry climate, while the southeast is cooler and more humid.

In northern Brazil the Amazon Basin’s humid tropical climate supports the world’s largest tropical rain forest. Rain falls almost every day in this region. The Amazon rain forest contains the world’s greatest variety of plant and animal life.

Reading Check Finding Main Ideas What is the climate like in the rain forest?

Natural Resources

The Amazon rain forest is one of the region’s greatest natural resources. It provides food, wood, rubber, plants for medicines, and other products. In recent years deforestation, or the clearing of trees, has become an issue in the forest.

The region’s land is also a resource for commercial farming, which is found near coastal areas of Atlantic South America. In some areas, however, planting the same crop every year has caused soil exhaustion, which means the soil is infertile because it has lost nutrients needed by plants.

Atlantic South America also has good mineral and energy resources such as gold, silver, copper, iron, and oil. Dams on some of the region’s large rivers also provide hydroelectric power.

Summary and Preview Physical features of Atlantic South America include great river systems and plains. The Amazon rain forest makes up a huge part of the region. Next you will learn about Brazil, the country of the Amazon.

Section 1 Assessment

Reviewing Ideas, Terms, and Places

1. a. Define What is an estuary?
   b. Explain How does the Amazon River affect the Atlantic Ocean at the river’s mouth?
   c. Elaborate What benefits do you think the rivers might bring to Atlantic South America?

2. a. Recall What kind of climate does Patagonia have?
   b. Make Inferences Why are temperatures in the south generally cooler than temperatures in the north?

3. a. Identify What resources does the rain forest provide?
   b. Analyze What is one benefit and one drawback of practicing commercial agriculture in the rain forest?
   c. Elaborate Soil exhaustion might lead to what kinds of additional problems?

Critical Thinking

4. Categorizing Look back over your notes. Then use a table like this one to organize the physical geography of Atlantic South America by country.

<table>
<thead>
<tr>
<th>Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
</tr>
<tr>
<td>Argentina</td>
</tr>
</tbody>
</table>

Focus on Writing

5. Describing Physical Geography Jot down notes about the physical features, climate and vegetation, landscapes, and resources of this area. Identify one or two images you could use for your Web site.