

## The Amazon River Phenomenon



Scientists debate whether the Nile in Africa or the Amazon in South America is the longest river in the world. In reality, it doesn't make any difference which river is technically the longest; each is the most important river on its respective continent. The Amazon travels over 4,000 miles from the Andes Mountains to the Atlantic Ocean and dumps the greatest volume of fresh water into the ocean of any river. The Amazon River drains the northern half of the South American continent, which accounts for the enormous volume of water it carries. Much of this land area is tropical rainforest that receives significant amounts of rainfall during the rainy season.

For those of us who have never seen a river as powerful as the Amazon, it is impossible to visualize its scope and scale. The Amazon connects with the Atlantic Ocean at Belem, Brazil; during the rainy season the river can be 200 to 300 miles across at this junction, flooding everything in its path. The river is still seven miles wide a thousand miles inland. The river is navigable by large cruise ships even two thousand miles from the ocean. Some major cruise lines offer South American cruises that include sailing on the Amazon River and smaller cruise ships are dedicated solely to Amazon cruises.

The Amazon River flows through the largest rainforest ecosystem in the world, covering forty percent of South America and including eight South American countries: Brazil, Columbia, Peru, Venezuela, Ecuador, Bolivia, Guyana and Suriname. The Amazon Rainforest covers approximately 2.5 million square miles. It's not just size that matters here; the Amazon Rainforest has as been called the "Lungs of Our Planet" because it continuously converts carbon dioxide into oxygen. Scientists estimate that the Amazon Rainforest generates approximately twenty percent of earth's oxygen.

The South American rainforest supports the mighty Amazon River with over 1,100 tributaries. Seventeen of the rivers that empty into the Amazon are over 1,000 miles long themselves. More than two-thirds of all the fresh water on earth is located in the vast Amazon basin. Native people of the area have traveled by boat for centuries, many in small hand-made dugout canoes. There are approximately 14,000 miles of waterways suitable for boats and an unknown number of miles of small streams and swampy marshes that can be navigated by canoe. With all this water across such diverse habitat, the Amazon Basin is home to over 2,000 species of fish, more species than inhabit the entire Atlantic Ocean.

The rainforest provides even more to the modern world than natural phenomena. Over the last several decades, researchers have been investigating tropical plants as a source of substances with medicinal properties. The U.S. National Cancer Institute has found in the neighborhood of 3,000 plants that contain substances that fight cancer cells and nearly three-quarters of these species are found in the rainforest. Twenty-five percent of the active ingredients in cancer-fighting drugs currently on the market come from plants found only in the rainforest.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Multiple Choice Questions

Circle the correct answer.

1. What river is the longest in the world?
  - a. Nile River
  - b. Amazon River
  - c. Either the Nile or the Amazon
  - d. None of the above
  
2. At the Atlantic Ocean how wide is the Amazon River during the rainy season?
  - a. 200 to 300 feet
  - b. 200 to 300 yards
  - c. 2 to 3 miles
  - d. 200 to 300 miles
  
3. The Amazon Rainforest has been called
  - a. The Lungs of Our Planet
  - b. The Mouth of the Ocean
  - c. Belem of Brazil
  - d. The Arms of the Andes
  
4. Which of the following countries is NOT part of the Amazon Basin?
  - a. Bolivia
  - b. Chile
  - c. Columbia
  - d. Venezuela
  
5. The Amazon River is navigable by
  - a. Cruise ships
  - b. Fishing boats
  - c. Canoes
  - d. All of the above
  
6. What percent of the fresh water on earth is found in the Amazon Basin?
  - a. 10 percent
  - b. 33 percent
  - c. 50 percent
  - d. 66 percent

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Short Answer Questions

1. Describe the size and scope of the Amazon River.
2. Locate the Amazon River on a map of South America.
3. Explain why the Amazon Rainforest is called the "Lungs of Our Planet."
4. Describe a benefit of the Amazon Rainforest that can change the lives of people around the world.
5. Research question: Plan a cruise on the Amazon River. Calculate the estimated costs, including airfare.
6. Research question: The Amazon Rainforest is being destroyed as people consume its resources. Write a short report about the rate of rainforest destruction and its environmental impacts.
7. Research question: Write a report about the longest river in North America and provide the same type of information found in this reading.

## Answer Key

### Multiple Choice

1. c.
2. d.
3. a.
4. b.
5. d.
6. d.

### Short Answer

1. The Amazon travels over 4,000 miles from the Andes Mountains to the Atlantic Ocean and dumps the greatest volume of fresh water into the ocean of any river. The Amazon River drains the northern half of the South American continent. During the rainy season the river can be 200 to 300 miles across where it empties into the Atlantic Ocean.
- 2.



3. The Amazon Rainforest has as been called the "Lungs of Our Planet" because it continuously converts carbon dioxide into oxygen. Scientists estimate that the Amazon Rainforest generates approximately twenty percent of earth's oxygen.
4. Over the last several decades, researchers have been investigating tropical plants as a source of substances with medicinal properties. The U.S. National Cancer Institute has found in the neighborhood of 3,000 plants that contain substances that fight cancer cells and nearly three-quarters of these species are found in the rainforest. Twenty-five percent of the active ingredients in cancer-fighting drugs currently on the market come from plants found only in the rainforest.
5. Individual response

6. Individual response

7. Individual response – report on the Mississippi River