

Negating Misconceptions About the Amazon

Secondary Level

Arizona State Standards

- Reading: Strand 2-Concept 1 (apply reading strategies), Strand 3- Concept 1 (analyze non-fiction)
- Writing: Research Document, Strand 1-Concept 1, Strand 2-Concept 1,2,6, Strand 3-Concept 6
- Listening and Speaking: LS-P1 & P5 (shares, presents, listens & responds), Vp-P1-P3 (develop, analyze, evaluate, organize)
- History: 1SS-P1 (chronological & spatial skills), 1SS-P5 (applying skills)
- Arts: 2AV-P2/P2/3AV-P2 (cultural & historical relevance) 2AV -P4 (role of art in society)

Goals & Objectives

1. Students will research specific geographical aspects of the Amazon region
2. Students will identify commonly held misconceptions about the Amazon region

Length of Lesson: 4 periods, each 1 hour

Materials & Preparation

1. Student copies of a blank map of South America
2. Amazon True or False Quiz (Included)
3. Access to the internet
4. Classroom map of South America
5. World Map

Lesson

Hour 1:

1. Have students take the True or False Amazon Quiz to assess prior knowledge (5-10 mins). Then set quiz aside.
2. Pass out a blank map of South America to each student, to be labeled together as notes are given. Present Sylvia Tesh's "Misconceptions About the Amazon" to the class. They should take notes and be labeling their maps as you speak. Guide them through the labeling by using classroom map.
3. Research Project Options: Begin with remaining class times
 - a. Write a 3-5 page paper on one aspect (NOT about the region in general) of the Amazon region (cultural, historical, environmental or political issue, particular location. Prepare a 10-minute presentation, with visual aides and notes from your paper.
 - i. Possibly provide students with about 4-5 specific topics or prompts if they are having trouble finding something to write about.
 - b. Tour of Amazon: You have 2 weeks and \$5,000 to tour the Amazon region. You must stay in your budget and travel to at least 5 different locations. You must create an itinerary, provide a journal with an entry (at least 50 words per entry) of what you did

and saw each day. Your journal must include activities of that area, descriptions of the environment/place, history of the location, where you slept and ate, and any interesting facts that drew you to that particular spot. You will provide a collage of images of your travels displayed on a poster board. Provide a listing of your expenses. On the map completed in class, show where you traveled and add locations and special features. You will give a 5 minute presentation of your tour to the class.

Hour 2:

1. Internet and/or library research

Hour 3:

Write and assemble project. Students must also be working on project outside of class.

Hour 4:

1. Students will present final products
2. Can opt to have peer evaluations

1. **T** **F** All of the Amazon region is in Brazil.
False. The head waters of the Amazon River are in Peru and Colombia. Snow from the Andes Mountains in Peru drains into the Amazon. The Amazon River Basin includes Peru, Colombia, Venezuela, Guyana, Surinam, French Guiana, Bolivia and Brazil
2. **T** **F** The Amazon River is the largest and only river in the Amazon region.
False. The Amazon River does not start until the Manaus River (with 1,100 tributaries, some huge on their own) feeds into it. Also, Rio Solimoes and Rio Negro are quite large, and join together at the city of Manaus. Downstream from Manaus, the blu/green Salimoes blends with the dark blackish-green Rio Negro.
3. **T** **F** Indigenous people make up a small percentage of the people who live in the Amazon region.
True. Indigenous people make up a small percentage of those living in the Amazon region. People in the rural Amazon region are settlers from other areas who come to farm the land, rubber tappers (Chico Mendes), miners (gold, tin, diamonds, silver, copper bauxite, iron ore), cattle ranchers, and oil and gas exploration workers. Over half of the indigenous population works in the cities as bankers, lawyers, scientists, scholars, doctors, nurses, owners and employees of stores, gas stations, taxi drivers, construction workers, teachers—all the jobs seen in U.S. cities.
4. **T** **F** Indigenous people in the Amazon region are primitive and isolated from the modern world.
False. Most of the indigenous groups are "urban Indians" who are educated, involved in politics, and work in professional fields. They use and have access to the internet, cell phones, email, CD's, DVD's, television, radio, etc.
5. **T** **F** Deforestation (killing trees) in the Amazon is mainly caused by farmers who need to clear the land for their crops.
False. Most deforestation in the Amazon region is caused by clearing the land for cattle ranching and building development.
6. **T** **F** The Amazon jungle that is being deforested is pristine and untouched by humans.
False. People have lived in the Amazon region for at least 14,000 years and have been continually changing the environment to suit their needs.

7. **T** **F** A large percent of the Amazon is already deforested.
False. Only about 15% of the original forest has been cut down so far. However, if the rate is not slowed, it will be completely gone in 40-50 years.
8. **T** **F** Deforestation of the Amazon is a concern of environmentalists worldwide.
False. For the most part the majority of the people in the Amazon region live in cities, so environmental concern is placed on protecting other forests, recycling, air and water pollution, endangered species, industrial waste, alternative sources of energy, etc.
9. **T** **F** The Amazon region is not just a rainforest.
True. The Amazon region (almost the size of the entire U.S.) is not, and has never been, entirely rainforest. Included are wetlands, savannas, temperate forests and dry areas.
10. **T** **F** If you took a cruise down the middle of the Amazon River you would see monkeys.
False. Not if you took a cruise down the middle of the river. In the middle, the river is so wide you would only see water. To see wildlife, you would have to go to a tributary.

Presentation Criteria and Evaluation

Stayed in price range, time frame and included at least five locations:

Misconceptions about the Amazon

Sylvia Tesh. PhD
Center for Latin American Studies
University of Arizona

February 12, 2005

Suggested bibliography

Susana Hecht and Alexander Cockburn The Fate of the Forest: Developers, Destroyers, and Defenders of the Amazon. New York: HarperCollins, 1990

Marianne Schmink and Charles Wood Contested Frontiers in the Amazon. New York: Columbia University Press 1992

Anthony Hall, ed. Amazon at the Crossroads: The Challenge of Sustainable Development. London: Institute of Latin America Studies, 2000

Hugh Raffles In Amazonia: A Natural History. Princeton NJ: University Press, 2002

Introduction:

While there are many misconceptions, it is true that the Amazon is really huge (compared to the US in size)

The Amazon River:

- called the "world's greatest river"
- second in size only to the Nile in length
- about 4,000 miles long and 6 miles wide at its widest
- carries 20% -- a fifth --- of all the fresh water in the whole world
- has an area equal to 90% of the contiguous US
- drains 1/3 of the continent of South America
- shelters somewhere between 1-15 million different species of plants and animals
- is the most biologically diverse ecosystem on earth
- has 1/3 of all species on earth

Misconceptions:

Myth number 1– The Amazon area is all within the country of Brazil

River basin includes Peru, Colombia, Venezuela, Guiana, Suriname, Guiana, and Bolivia also

Myth number 2 – The only large river in the area is the Amazon River

1,100 tributaries; some of them huge on their own
Rio Solomões and Rio Negro are some of the large rivers that surround the area

Myth number 3.– Amazon, Amazonia, and Amazonas are all the same thing

Amazon (in English) = Amazonia (in Portuguese)
Amazonas are one of 6 Brazilian states where rivers drain into the Amazon (Para, Acre, Rondonia, Tocantins, Amapa)

Myth number 4 – There are mainly indigenous people living in the Amazon region

There are many different indigenous groups
233 indigenous groups in Brazil (FUNAI estimate)
182 total in Amazon
Fewer than a million of Indigenous people, but there once were as many as 5 million indigenous people who thrived in the Amazon

- Majority were killed or died after contact with Europeans

Indigenous people are a small % of all the people who live in the Amazon

In the rural areas there are also:

Settlers (small farmers originally from other areas) rubber tappers (Chico Mendes)

Miners (gold, tin diamonds, silver, copper bauxite)

world's greatest iron ore deposits in state of Pará], cattle ranchers,

Oil and gas exploration

Over half the residents of the Amazon region live in cities such as

Manaus: population 1.2 million, residents: bankers, lawyers, scientists and scholars

Belem – other large city of about the same size at the mouth of the Amazon

Myth # 5 – Indigenous people who live in the Amazon are primitive / unsophisticated/ isolated

Most indigenous groups are well integrated into the politics and economy

“urban Indians” – well educated

Indigenous people are often the poorest in their countries

Indigenous peoples:

Fight against dams, roads, oil exploration, cattle ranching
Fight for territorial integrity, cultural survival, political participation

Myth # 6 – A large percent of Amazon is deforested

Currently, about 20% of the original forest has been cut down, but places are regrowing

Why it's hard to say just how much deforested:

How many trees have to be cut down before “deforested”

If land re-forested, how to count it?

If land reforested in non-native trees like eucalyptus, how count?

What will happen in the future if rate of deforestation not slowed?

Reich says “point of no return” by 2011-2016 — says James Alcock, Penn State

entirely in 40-50 years

Myth # 7 – Deforestation is caused by fires, and is the fault of small farmers who engage in slash and burn agriculture

Most deforestation due to cattle ranching and large-scale development.

Direct and indirect consequence of deliberate Brazilian policies to develop the Amazon

- Began during 20 year military dictatorship (1964–1984)

Myth # 8. What is being cut down is virgin, pristine forest that is untouched by humans

People have lived in the Amazon area for at least 14,000 years and ever since then they have been changing the forest by manipulating the ecosystem

Indigenous peoples practiced intensive agriculture for thousands of years before the Europeans arrived
Europeans were the ones to make significant transformations to the land

Prehistoric Amazonians had cut down forests for agriculture fields that were extensive enough to be identified today with aerial photography

Accounts by 16th century Spanish explorers describe not only land under extensive exploitation by farmers, but broad roads leading to planned fields and settlements lining farms continuously for several miles

After conquest, indigenous exploitation of the forest became even more intense
By the 17th and 19th centuries, Amazonian peoples were supplying Europeans with a stunning array of agricultural products in exchange for metal tools

Products included:

- Vegetables, timber, rubber, cotton, spices, nuts, fruits, waxes and meat etc.

When indigenous people got metal tools, they increased agriculture production, although they didn't necessarily clear more forest

And the Europeans introduced new crops, cattle, chickens, pigs which became part of every Amazonian village scene by early 18th century

Indigenous people in the Amazon have been manipulating rivers and streams, -- doing "water management" --- for a long time

- Hugh Raffles writes about routine interference by indigenous people

For several hundred years indigenous people have dug new channels through grasslands to change the course of rivers in order to make short cuts for themselves to get from one place to another and to irrigate crops and to reach economically valuable forest products/games

They also filled in swamps, built small dams and dismantled water falls

The results have been not only easier and more efficient agriculture. but changes to regional landscapes, changes to whole ecologies and changes in social organization

Raffles says that the "...paradoxical irony of environmental conservation frequently lies in its attempt to protect nature from the very people who created it in its currently desirable form."

The general point here is that people have "always" lived in the Amazon region

People have been changing the ecology for as long as anyone knows

So the story we hear today about development and globalization and modernization suddenly destroying pristine nature

Is ignorant of history

And the story can have devastating consequences for indigenous people because if you believe that the Amazon rainforest and region is "pristine" and you want to "save" or "protect it"

Then you are likely to think that humans should not live there

You are likely to support a policy of driving people out the land that they have live in for centuries

Myth # 9 – Amazon soil is extremely fertile

Rainforest's soils are mostly thin and poor as they degrade and erode quickly after clearing

In tropical forests such as the Amazon, nutrients are stored in living organisms, not the soil

- in plants, animals, micro-organisms
- in plant litter on forest floor

When trees are cut down and burned, soil is left barren with nothing to capture/ create nutrients

There is a huge variation in tropical soils, and the Amazon area is not - and never had been - all forest

There are also wetlands, savannas, dry areas etc with different climates and different geologies

Myth # 10– Amazonian deforestation is the principle concern of environmentalists in Brazil

For most people Amazon is very far away, and seen as exotic

Majority of population lives in cities

Agendas of environmental movement organizations focus on:
protecting what is left of other forests recycling,
air and water pollution,
endangered species,
industrial toxins
alternative sources of energy protecting ecosystems
etc

In the Amazon area, a big concern of environmentalists is also pollution from gold mining which uses mercury

- Mercury is extremely harmful to a lot of organisms

Myth # 11. – yYu can take a cruise down the river and see monkeys etc

Not if you go down the center of the river (back to #1 re size)
It's so wide that all you see from the boat is water
For an "Amazon experience" you have to go on a tributary
But go if you can