



Pollution in Latin America



Focus Lesson

- Teacher will show a series of photos that show oil pollution in Venezuela, Air Pollution in Mexico City, and deforestation in the Amazon Rain Forrest. Teacher will discuss each photo and then have students complete a series of questions about what they see, and what they see, and how the region could be impacted by environmental issues.















Objective: The student will explain the major concerns in Latin America regarding issues of air pollution in Mexico City, destruction of the rainforest in Brazil, and oil-related pollution in Venezuela in order to discuss how these issues impact the economy, and well being of citizens living in the region.

SS6G2a: Explain the major concerns of Latin America regarding the issues of air pollution in Mexico City, the destruction of the rainforest in Brazil, and oil-related pollution in Venezuela.

Objective: Break it down

Tell about: in detail, what happens

Region colonized by Europe in the late 1400s that includes, Mexico, South America, and Caribbean Islands

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Effect people and money

People living in the area

A country that relies heavily on the oil industry. The countries major employer

One of the most populated cities in the world

Eco-system

Talk about

“WE Do” Guide Notes

- Teacher and students will participate in discussion while taking guided notes.

COMING TOGETHER IS A BEGINNING;
KEEPING TOGETHER IS PROGRESS;
WORKING TOGETHER IS SUCCESS.

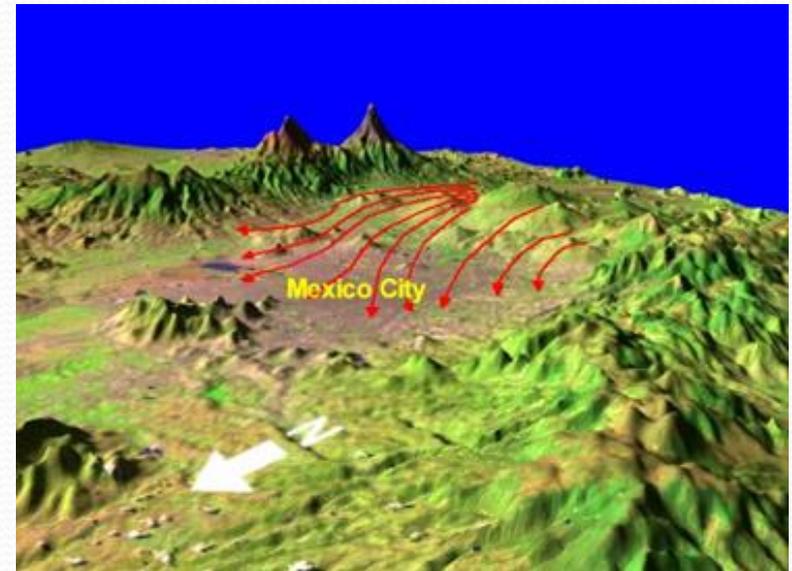
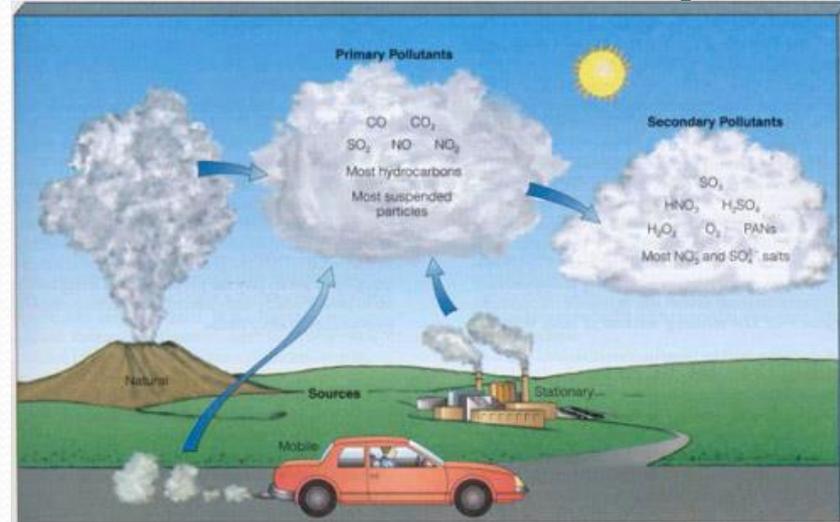
Henry Ford

Air Pollution in Mexico City

- The problem: *Mexico City is known as one of the world's worst areas of air pollution. The air is so bad that children are more likely to have breathing problems and develop lung disease when they grow up. Older adults must stay indoors and limit activity. On most days, the hazy, polluted sky blocks the view to the mountains.*

Causes of Air Pollution in Mexico City

- Overcrowding - 19+million people – more than double the population of the entire state of GA!
- Industrialization – thousands of factories
- Vehicle emissions – over three million cars
- Geography - Mexico City has most of its wind currents blocked by surrounding hills and mountains. Therefore, air pollution/smog (smoke/fog) sometimes can't be blown out of the area for days...sometimes weeks!



Effects of Air Pollution in Mexico City

- Damage to vegetation
- Harm to atmosphere (depletion of ozone layer)
- Harm to human beings (causes illness and disease)
- Causes acid rain (damages ancient monuments)



The Role of the Mexican Government

- Drivers must leave their cars at home one day each week
- Citizens are encouraged to ride buses and trains or carpool to work
- Cars are inspected more often
- On days of highest pollution levels, certain factories may be closed



Video Break

- <https://www.youtube.com/watch?v=SoClrye-woE>

Take video notes while watching.

Destruction of the Rainforest in Brazil

- The problem: *The Amazon Rainforest is home to more than 40,000 different kinds of plants and thousands of types of animals. The rainforest is known as the “lungs of the earth” because they convert carbon dioxide into valuable oxygen. This beautiful and important environment is threatened by human activity. Many Brazilians live in poor conditions. One way the people get money is to clear large areas of the forest – **deforestation**. In the past ten years, nearly 200, 000 square miles of rainforest have been lost due to clearing the land for other economic uses.*

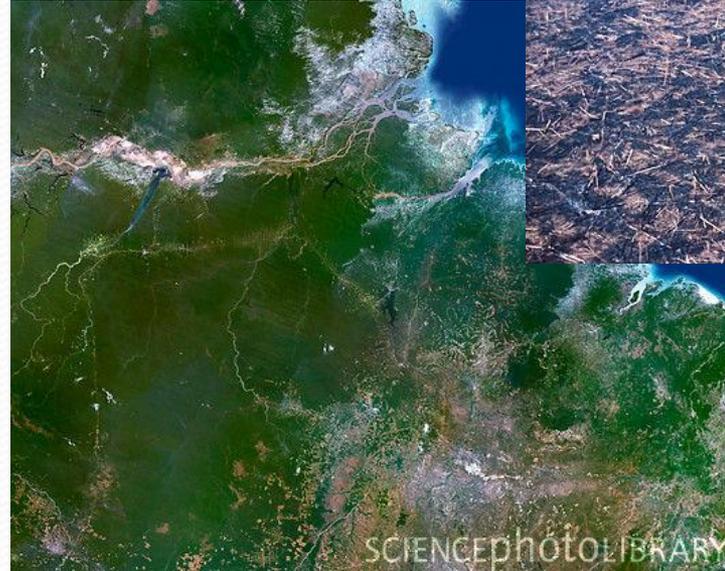
Causes of Destruction of Rainforest in Brazil

- Road building
- Slash and burn farming - soybean farms
- Cattle ranching
- Logging
- Mining
- New settlements to alleviate overcrowding in urban areas



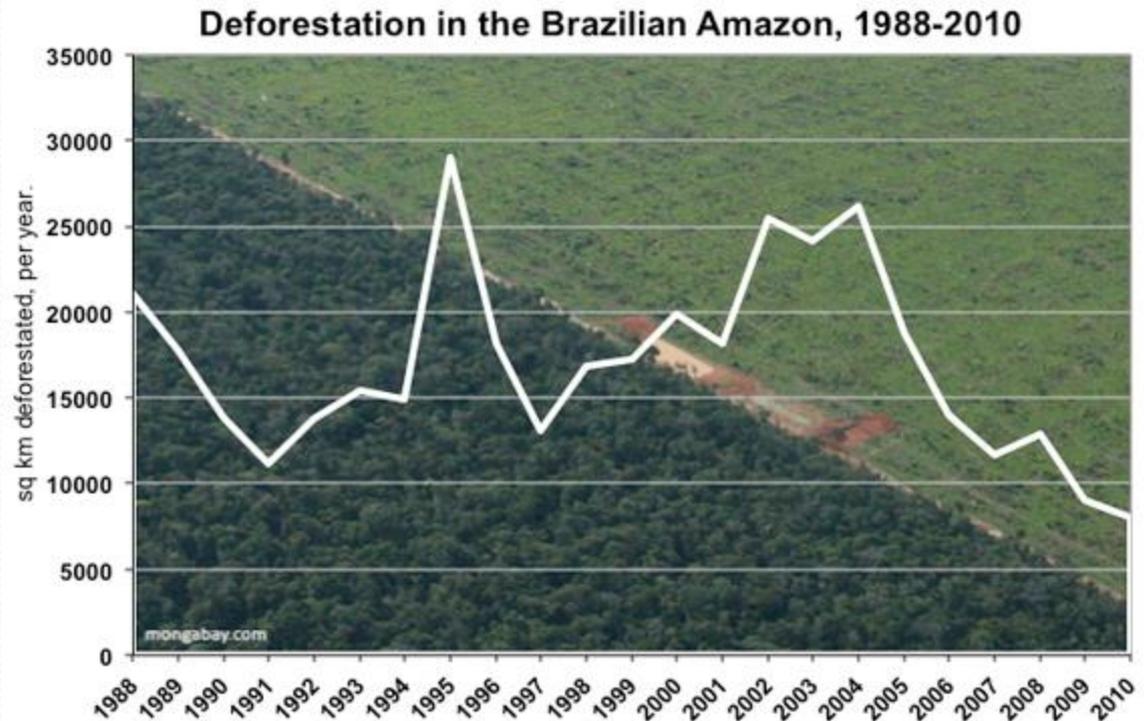
Effects of Destruction of the Rainforest

- Disrupting way of life for native populations that depend on the forest
- Loss of habitat for millions of species
- Climate change – global warming



The Role of the Brazilian Government

- The government has created laws to control the amount of forest that is cut down BUT little money is spent enforcing those laws
- Environmental groups are working with Brazil's government to find ways to save the rain forests



Video Break

- <https://www.youtube.com/watch?v=eKIgleUBDdE>

Oil-Related Pollution in Venezuela

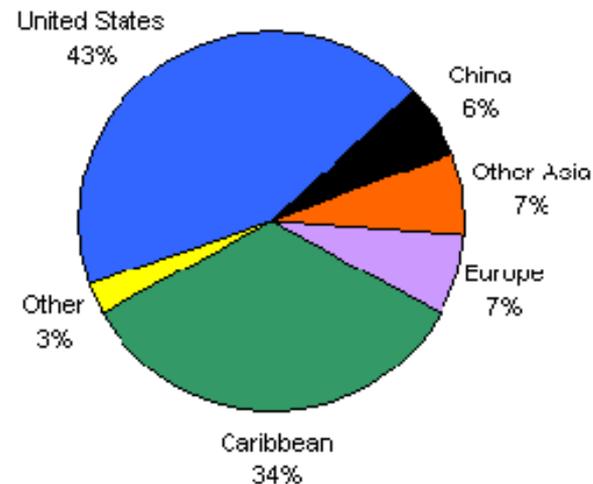
- The problem: *Venezuela is one of the largest producers of oil and natural gas in the world. The money from oil sales accounts for about half the money received by the government of Venezuela. The production of oil and natural gas has come at a cost. Along the Caribbean Sea, Venezuela's coast has become polluted with oil. Oil spills and tanker leaks have damaged the environment and have negatively affected Lake Maracaibo.*

Causes of Oil-Related Pollution in Venezuela

- Lots of money from oil production sales
- One of the top 4 sources of oil for the U.S.
- Burning Oil



Venezuelan Crude Oil Exports by Destination, 2010



Source: EIA, APEX Database, FACTS Global Energy

Effects of Oil-Related Pollution

- Water pollution
- Air pollution
- High levels of cancer, skin problems, breathing problems, and digestive tract problems
- Toxic Waste
- Occasional oil spills
- Burns highest amount of carbon dioxide in L. Amer – contributes to global warming



The Role of the Venezuelan Government

- In Venezuela, the discovery of oil brought new wealth to the government. The same government that is supposed to regulate oil pollution and clean up.
- Venezuela's state oil company is working to clean up its oil pits and has adopted an environmental policy to focus more closely on environmental protection



Video Break

- <https://www.youtube.com/watch?v=Izx9awV1wx8>
- Make sure you are reading the subtitles, the video is spoken in Spanish!

“You Do” Collaborative Lesson

- Students will work with a partner to complete a DBQ on the three environmental issues of Latin America.
- Students will work together, and complete a “Say Something” discussion while analyzing each of the documents.
- Students will then complete a collaborative task using their DBQ.

You Do: Individual

- Students will create an environmental issues super-hero character! Students will engage in a creative writing task that will use the information from notes, videos, and DBQ to create a super hero that will compact one of the three issues plaguing Latin America. (detailed Rubric provided)

