



Amazon Rubber Boom

Matthew Bishop

Kyler Burke

Amazon Rubber Boom Lesson Plans

Learning-Focused Strategies Extending Refining Lesson Plan: EATS

Unit: Amazon Rubber Boom Grade: 8th Date: Lesson 1

<p><u>ESSENTIAL QUESTION:</u> What is the MOST important concepts or skills? With key questions if necessary.</p>	<p>Overarching EQ--How does one event impact individuals throughout the world? EQ--How does the Rubber Boom create jobs in South America? Where can rubber be found in South America? Objective--Students responding to the process in which rubber is made and where rubber originates</p>
<p><u>Activating Strategy:</u> How will you activate your lesson or link to prior knowledge? (Examples: KWL, work maps, Wordsplash, etc.)</p>	<p>Think, Pair, Share (Connection to real life) What is rubber used for today? Make individual list (2 min, 2 min, 2 min) Make a class list Balloons, rubber boots, gloves, tires, rubber bands, basketball, football, all sports balls, batting gloves, cleats, shoes, rubber duckies, etc.</p>
<p><u>TEACHING STRATEGIES:</u> What instructional strategies will you use in your lesson? (Examples: graphic organizer, distributed guided practice, distributed summarizing, collaborative pairs)</p>	<p>Watch video--How rubber is made? (6 min) https://www.youtube.com/watch?v=CKq42J7SaWw Guided Worksheet Where does rubber come from? Sap Who were the first to discover rubber? Native tribes How did these people use rubber? Created balls and played games List or draw** 3 steps of the rubber making process--how is each important? (answer after video) Part of discussion. Students can choose any 3 steps** 1. Drain sap 2. Strain impurities and add formic acid 3. Mix tofu like substance/sticky 4. Rolled like dough 5. Rinse off formic acid 6. Dry sheets--thickens and darkens a. Liquid to solid 7. Store stacks in warehouse 8. Soak in water 9. Machine with many brushes--scrub off dirt 10. One more rinse 11. Color varies on tree they came from 12. Build fire and smoke sheets in chamber--5 days prevents growth of mold 13. Clip out contaminants--insects</p>

	<p>14. Grade rubber sheets 15. Stack according to grade 16. Hydraulic bailer 17. Presses stack into cube form 18. Spray rubber cubes 19. Transported</p> <p>Differentiation--list and Why are rubber sheets different colors? How are rubber sheets graded? Discussion after worksheet (5 min) What surprised you/ what did you already know</p> <p>Interactive Map (20 min)</p> <ol style="list-style-type: none"> 1. Locate what countries the Amazon River Basin is located in 2. Locate main exports of these countries. 3. Name the climates found within these countries. 4. Where are most of the people in South America located? 5. After studying the map why do you think that the rubber boom flourished in these countries? <p>http://wtf.pbslearningmedia.org/resource/rttt12.soc.ush.samap/south-america-interactive-map/</p>
<p><u>SUMMARIZING STRATEGIES:</u> How will students summarize what they are learning during the lesson and at the end? (Examples: Ticket out the Door, 3-2-1, etc. Answer the EQ)</p>	<p>Summarizing Strategy--Ticket out the door Predict which country will be the center of the rubber boom? Why?</p>

Video Worksheet w/ answers

How rubber is made?

1. Where does rubber come from? Sap of trees
2. Who were the first t people o discover rubber? Native tribes
3. How did these people use rubber? Created balls and played games

4. List or draw 3 steps of the rubber making process—How is each important?

a. One

Drain sap, Strain impurities and add formic acid, Mix to a sticky substance, Rolled like dough, Rinse off formic acid, Dry sheets--thickens and darkens, Liquid to solid, Store stacks in warehouse, Soak in water, Machine with many brushes--scrub off dirt, One more rinse, Color varies on tree they came from, Build fire and smoke sheets in chamber--5 days prevents growth of mold, Clip out contaminants—insects, Grade rubber sheets, Stack according to grade, Hydraulic bailer, Presses stack into cube form, Spray rubber cubes, Transported

b. Two

c. Three

5. Why are rubber sheets different colors?

a. Rubber starts out as white, but then turns to yellow and black

6. How are rubber sheets graded?

a. They are graded by the number of rips, holes, and tears in them

Learning-Focused Strategies Extending Refining Lesson Plan: **EATS**

Teacher : Unit: Amazon Rubber Boom Class: 8th Grade Date of lesson: Lesson 2

<p><u>ESSENTIAL QUESTION:</u></p> <p>What is the MOST important concepts or skills?</p> <p>With key questions if necessary.</p>	<p>How does a single event impact individuals throughout the world?</p>
--	---

<p><u>Activating Strategy:</u></p> <p>How will you activate your lesson or link to prior knowledge?</p> <p>(Examples: KWL, work maps, Wordsplash, etc.)</p> <p>AND/OR</p>	<p>https://www.youtube.com/watch?v=sp0MwYbLUFU</p> <p>How can we use outlines to take notes? Discuss with neighbor</p>
<p><u>TEACHING STRATEGIES:</u></p> <p>What instructional strategies will you use in your lesson? (Examples: graphic organizer, distributed guided practice, distributed summarizing, collaborative pairs)</p>	<p>Read through</p> <p>The Upper Amazonian Rubber Boom and Indigenous Rights 1900-1925; Ingrid Fernandez, Florida Gulf Coast University</p> <p>http://fch.fiu.edu/FCH-2007/Fernandez-The%20Upper%20Amazonian%20Rubber%20Boom%20and%20Indigenous%20Rights%201900.htm</p> <ol style="list-style-type: none"> 1. Setting the scene of the rubber economy Economy, location, governments 2. Rubber industry and the Indians 3. Enslavement of the Indians Punishments 4. Mediators—Government officials and missionaries Missionaries and government officials 5. End of the Rubber Boom <p>Each subsection under these 5 should have one bullet point per paragraph.</p> <p>Journal Entry—you can use your outline—How were Indians treated during the Amazon Rubber Boom? Be specific. (5 sentences)</p>
<p><u>SUMMARIZING STRATEGIES:</u></p> <p>How will students summarize what they are learning during the lesson and at the end? (Examples: Ticket out the Door, 3-2-1, etc. Answer the EQ)</p>	<p>3-2-1</p> <p>3 things you learned about the Amazon Rubber Boom</p> <p>2 things you already knew about the Amazon Rubber Boom</p> <p>1 question you have about the Amazon Rubber Boom</p>

Learning-Focused Strategies Extending Refining Lesson Plan: EATS

Unit: Amazon Rubber Boom

Class: 8th Grade

Date of lesson: Lesson 3


<p><u>ESSENTIAL QUESTION:</u></p> <p>What is the MOST important concepts or skills?</p> <p>With key questions if necessary.</p>	<p>How does the rubber industry impact people in positive and negative ways?</p>
<p><u>Activating Strategy:</u></p> <p>How will you activate your lesson or link to prior knowledge?</p> <p>(Examples: KWL, work maps, Wordsplash, etc.)</p> <p>AND/OR</p>	<p>Watch video http://www.sapiens.org/culture/rubber-era-myths/</p> <p>Discuss</p> <ol style="list-style-type: none"> 1) What was the myth of the ghost ship? Ask students who was on the ship? 2) What was the myth of the pink dolphin? Pink dolphin described the abuses and sexual violence towards indigenous women. 3) What was the myth of the black tiger? Rubber Barons would come in the middle of the night where the indigenous people slept and killed those who didn't do their job. 4) Based on the video—describe each of these with a neighbor
<p><u>TEACHING STRATEGIES:</u></p> <p>What instructional strategies will you use in your lesson? (Examples: graphic organizer, distributed guided practice, distributed summarizing, collaborative pairs)</p>	<p>Read http://www.sapiens.org/culture/rubber-era-myths/</p> <p>Write a Journal Entry—Pretend you are a Native; describe tigre negro and your overall experience working in the rubber industry.</p> <p>Share your experience with a partner—List similarities and differences.</p> <ol style="list-style-type: none"> 1. What did you and your partner include? Why? 2. Why was life difficult for Indigenous people? How did you show each depict these differences?
<p><u>SUMMARIZING STRATEGIES:</u></p> <p>How will students summarize what they are learning during the lesson and at the end? (Examples: Ticket out the Door, 3-2-1, etc. Answer the EQ)</p>	<p>Ticket out the door—Choose one myth and describe it using three sentences. Ghost ships Pink Dolphin Black Tiger</p> <p>Share with neighbor and class.</p>

Learning-Focused Strategies Extending Refining Lesson Plan: EATS

Unit: Amazon Rubber Boom

Class: 8th Grade

Date of lesson: Lesson 4

<p><u>ESSENTIAL QUESTION:</u></p> <p>What is the MOST important concepts or skills?</p> <p>With key questions if necessary.</p>	<p>What is the purpose of an outline?</p> <p>How does a single event impact individuals throughout the world?</p>
<p><u>Activating Strategy:</u></p> <p>How will you activate your lesson or link to prior knowledge?</p> <p>(Examples: KWL, work maps, Wordsplash, etc.)</p> <p>AND/OR</p>	<p>View Madeira Mamore Railway http://www.bbc.com/news/world-latin-america-11578463</p> <p>How many kilometers was the Madeira Mamore Railway? About 350 km</p> <p>What cities did the railroad travel through? Guajara Mirim and Porto Velho</p> <p>Why was the railroad difficult to build? It went through the dense forest and they had to chop down trees to make a passageway for the railroad</p> <p>Why was the railroad built along the river? So they could easily supply the railroad with men and resources</p>
<p><u>TEACHING STRATEGIES:</u></p> <p>What instructional strategies will you use in your lesson? (Examples: graphic organizer, distributed guided practice, distributed summarizing, collaborative pairs)</p>	<p>Read “Death in the Devil’s Paradise http://www.survivalinternational.org/articles/3282-rubber-boom</p> <p>With the class outline the first 2 paragraphs.</p> <p>With a partner outline the next 2 paragraphs.</p> <p>By yourself outline the rest of the article.</p> <p>Journal Entry—Why was the railroad called Devil’s Paradise? Be specific.</p> <p>Analyze Cartoons—Powerpoint</p>
<p><u>SUMMARIZING STRATEGIES:</u></p> <p>How will students summarize what they are learning during the lesson and at the end? (Examples: Ticket out the Door, 3-2-1, etc. Answer the EQ)</p>	<p>Slide 3—What are your reactions to this cartoon? What do you see?</p> 

Learning-Focused Strategies Extending Refining Lesson Plan: EATS

Unit: Amazon Rubber Boom

Class: 8th Grade

Date of lesson: Lesson 5

<p><u>ESSENTIAL QUESTION:</u></p> <p>What is the MOST important concepts or skills?</p> <p>With key questions if necessary.</p>	<p>How does the Amazon Rubber Boom impact the world?</p>
<p><u>Activating Strategy:</u></p> <p>How will you activate your lesson or link to prior knowledge?</p> <p>(Examples: KWL, work maps, Wordsplash, etc.)</p> <p>AND/OR</p>	<p>Assembly Line Video—Henry Ford</p> <p>https://www.youtube.com/watch?v=thQfzMNu3U</p>
<p><u>TEACHING STRATEGIES:</u></p> <p>What instructional strategies will you use in your lesson?</p> <p>(Examples: graphic organizer, distributed guided practice, distributed summarizing, collaborative pairs)</p>	<p>Divide students into groups of 3</p> <ul style="list-style-type: none"> Beginnings The Start of Fordlandia (2) Health Trouble (2) A New Start (2) The End <p>Students will read their section with their group members. They will take notes/highlight important material while reading their section. Then, they will discuss the most important points among their group members.</p> <p>Students will create a Ford Powerpoint slide for their section with 3-5 bullet points and 1 picture. Once they are finished, each group will have one member present their section to the class. The teacher will combine each slide into a Powerpoint for students to access and use to study.</p>
<p><u>SUMMARIZING STRATEGIES:</u></p> <p>How will students summarize what they are learning during the lesson and at the end?</p> <p>(Examples: Ticket out the Door, 3-2-1, etc. Answer the EQ)</p>	<p>Analyze quote—Ticket out the door</p> <p>“The really big idea behind and in front of rubber is the lesson of Henry Ford. Ford with his heroic plantation will not bring us all the rubber we need, but he is the man who had brought rubber home; brought it back to the Western Hemisphere to stay! No matter what happens, in war or peace, never again will we be dependent on the far-off East Indies for our rubber.” □--H.A. Phillips in “The Big Three: Rubber, Iron, Oil.” <i>Cosmopolitan</i>, July 1944.</p> <ol style="list-style-type: none"> 1) Initial thoughts/Reactions 2) Why was it important to keep rubber in the Western hemisphere?

Learning-Focused Strategies Extending Refining Lesson Plan: EATS

Unit: Amazon Rubber Boom

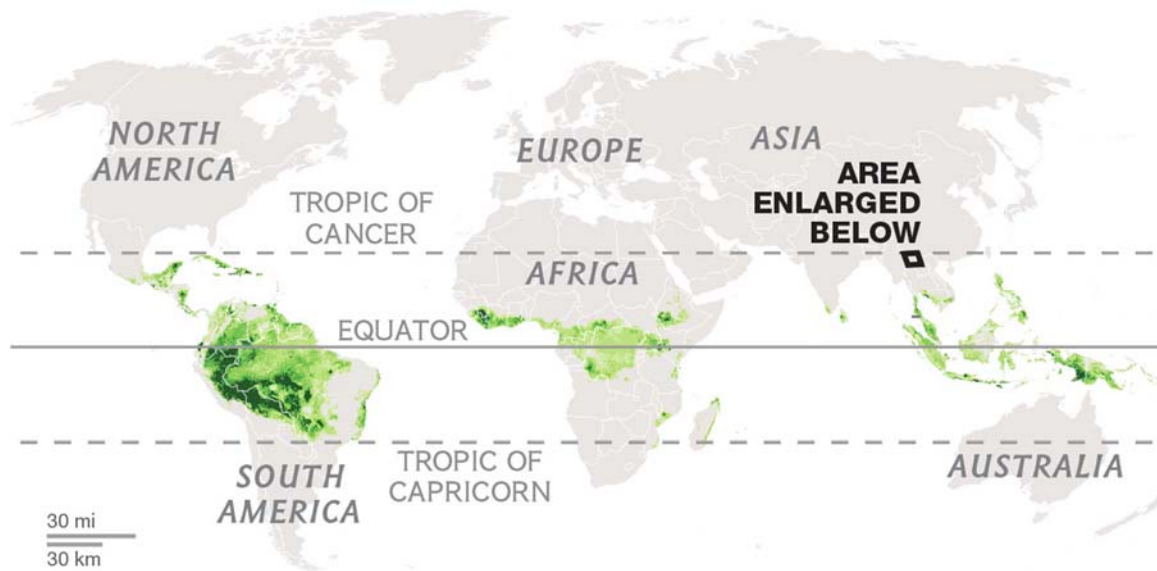
Class: 8th Grade

Date of lesson: Lesson 6

<p><u>ESSENTIAL QUESTION:</u></p> <p>What is the MOST important concepts or skills?</p> <p>With key questions if necessary.</p>	<p>How does supply and demand alter working conditions?</p>
<p><u>Activating Strategy:</u></p> <p>How will you activate your lesson or link to prior knowledge?</p> <p>(Examples: KWL, work maps, Wordsplash, etc.)</p> <p>AND/OR</p>	<p>View Chart—on Powerpoint</p> <p>Why did the Amazon Rubber industry decimate?</p> <p>When did eastern countries first produce rubber? Why?</p>
<p><u>TEACHING STRATEGIES:</u></p> <p>What instructional strategies will you use in your lesson?</p> <p>(Examples: graphic organizer, distributed guided practice, distributed summarizing, collaborative pairs)</p>	<p>Rubber Boom Quiz</p> <p>Begin Final Project</p> <p>Create a poster/brochure that takes a stance on the Amazon Rubber Boom.</p> <p>Clearly state your stance somewhere on your poster or brochure (5 points)</p> <p>Backup you stance with at least 5 facts (each worth two points) (10 points)</p> <p>Pictures (Include at least 5 pictures) (10 points)</p> <p>Creativity—(10 points)</p> <p>MUGS—(10 points)</p> <p>Clearly state your Result/Outcome if people don't take action to your</p>

	stance (5 points)
<p>SUMMARIZING STRATEGIES:</p> <p>How will students summarize what they are learning during the lesson and at the end? (Examples: Ticket out the Door, 3-2-1, etc. Answer the EQ)</p>	Share Project ideas with the class

Photos on Power point



Questions

Where does rubber grow?

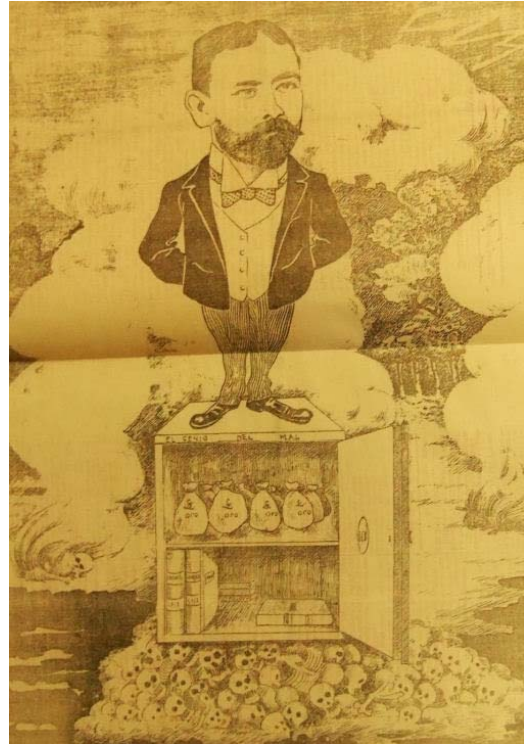
Rubber grows in warm, tropical environments near the equator and between the Tropic of Cancer and Tropic of Capricorn.

Why does Brazil dominate the rubber industry during the 1800s and early 1900s?

The rubber tree is native to the Amazon. The Amazon is much larger and suitable for the large rubber market.

What are your reactions to this photo?
What do you see?

The picture depicts a rubber baron standing on a safe full of money. Underneath the safe is a pile of bones from all the Natives who lost their lives from the enslavement and forced labor. In the background is destruction of the environment.



“Each one in its place” and “To victory”

What role does the Amazon Rubber Boom play in this cartoon?

This cartoon refers to the forced labor during wartimes when countries involved in WWI and WWII used rubber for vehicles and tanks.

Descriptors	Exceptional	Proficient	Average	Needs Imp
Content—include historical facts to support your position to favor or oppose the Amazon Rubber Boom.	Student gives 4 events or reasons to support their claim and detailed evidence to support their position.	Student gives 3 reasons to support their claim and some evidence to support their position.	Student gives 2 reasons to support their claim and little evidence to support their position.	Student gi reasons to claim and no detailed support th
Construction/Craftmanship (Text must be typed)	Poster/Presentation is well organized and flows from one idea to another. Text is legible/large enough to read. Includes 4 pictures (1 photo per event)	Poster/Presentation is organized and makes logical sense. Text is legible/large enough to read. Includes 3 pictures.	Poster/Presentation is somewhat organized and mostly makes logical sense with some errors. Text is somewhat difficult to read or too small to easily read. Includes 2 pictures.	Poster/Pre organized make logi many erro difficult to no picture picture.
MUGS—Mechanics, Usage, Grammar, Spelling	0-4 Mistakes.	5-9 Mistakes.	10-13 Mistakes.	More than
Oral	Student shows enthusiasm about the topic. Student is prepared and organized. Student spoke clearly and at a conversational pace. Rare use of Filler words (like, um, ok, uh...etc.)	Student shows some enthusiasm. Student is somewhat prepared and organized. Student spoke somewhat clearly and at a conversational pace. Little use of filler words.	Student shows little enthusiasm. Student is minimally prepared and organized. Student spoke at a barely clear and conversational pace. Moderate use of filler words.	Student is about the Student is organized presentati Student do clearly and conversati Overuse o

Name: _____

Date: _____

Period: _____

AMAZON RUBBER BOOM QUIZ

Directions: Please read all of the questions in their entirety and select the best answer or answer the question to your fullest ability. Good luck!

1. Chemically rubber is a/an

- a. Hydrophobe
 - b. Elastomer
 - c. Adhesive
 - d. Steroid
2. The Amazon Rubber Boom took place in what country?
- a. Brazil
 - b. Mexico
 - c. Argentina
 - d. Chile
3. True or False, if the statement is false please correct the statement so that it is true.
- a. The Amazon Rubber Boom increase quality of life of the indigenous people.
 - b. Rubber Barons control the indigenous people and the Amazon Rubber Boom.
 - c. The Amazon Rubber Boom had no negative impacts on the environment.
4. Essay, please explain one of the following myths or legends of the Amazon Rubber Boom.
- a. Black Tiger, Pink Dolphin, or Ghost Ships

Amazon Rubber Boom
By: Kyler Burke and Matthew Bishop

Essential Questions:

- How does one event impact individuals throughout the world?
- How can industrialization change the location in which the event is happening?
- How can the rubber industry impact individuals and groups of individuals in positive and negative ways?
- How does supply and demand alter working conditions?

Prior Knowledge

Definition of Indigenous people

Definition of Industrialization

What is rubber

Ability to differentiate among classes (social status) of people

Location of South America

Basic knowledge of transportation methods and technology (Automobiles, planes, trains, ships)

Definition of slavery

Performance Task

Create a poster presentation describing why you are in favor or not in favor of the Amazon rubber boom and rubber industrialization.

Benchmarks

Map quiz with colors and numbers to identify key countries, geographic features, indigenous populations, rubber production

Think pair share compare and contrast indigenous people and US people involved in the rubber production

Knows

- How rubber is made
- Geography of the Amazon
- Indigenous people
- Impact by the rubber industry
- Destruction of the people, culture, etc.
- Habitat loss
- Development of the railroads
- Products needed to create rubber
- Deforestation, clear cutting, habitat loss
- Military and medical equipment
- Factory conditions
- Labor Laws
- Blue collared workers

- Vocabulary
 - Indigenous
 - Industrial Revolution 1879-1912
 - Elastomer
 - Amazon Rainforest
 - Rubber Barons
 - Madeira-Mamoré Railroad
 - Monopoly
 - Import and Export Economies
 - Working Class, Wealthy

Dos

- Discussion
- Compare and Contrast
- Read
- Write
- Establish a timeline
- Design a poster

Standards

Standard - 8.2.9.D

Interpret how conflict and cooperation among groups and organizations in Pennsylvania have influenced the growth and development of the US.

- **Ethnicity and race**
- **Working conditions**
- **Immigration**
- **Military conflict**
- **Economic stability**

Standard - 7.4.9.B

Compare and contrast the effect of people on the physical region across regions of the United States.

Standard - 7.4.9.A

Compare and contrast the effect of the physical systems on people across regions of the United States.

Standard - 4.1.10.B

Explain the consequences of interrupting natural cycles.

Standard - 4.3.10.A

Evaluate factors affecting the use of natural resources.

- **Evaluate the effect of consumer demands on the use of natural resources.**

- **Analyze how technologies such as modern mining, harvesting, and transportation equipment affect the use of our natural resources.**
- **Describe how local and state agencies manage natural resources.**

Standard - 4.3.10.B

Analyze how humans manage and distribute natural resources.

- **Describe the use of a natural resource with an emphasis on the environmental consequences of extracting, processing, transporting, using, and disposing of it.**
- **Analyze the impact of technology on the management, distribution, and disposal of natural resources.**