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Education Resources – WWH Fall Scholar 2021- Taite Ines Lesson Plan 2 – Panama Canal

Title: The Panama Canal	Grade Levels: 9 & 10
Learning Outcomes/Objectives: By the end of this lesson, students should: <ul style="list-style-type: none">- Understand how the Panama Canal revolutionized global transportation- Apply the knowledge of the Panama Canal's affects onto present day shipping companies and present day globalization- Learn and understand the introduced vocab of the Panama Canal lessons- Understand the political, emigrational, national and economic effects of the Panama Canal since 1914.	
I Can Statements: Students understand the role of the Panama Canal through a historical lens, realizing its effects on a global level. They understand this canal in relation to the Trans-Panama migration as well as its economic and political effects.	
Essential Questions <ul style="list-style-type: none">• What would the world be like without the Panama Canal?• How the Panama Canal changed import/ export?• How has the Panama Canal affected different types of people?• What countries have been most affected by the Panama Canal?	
Essential Vocabulary (students will learn): <ul style="list-style-type: none">- Nautical Miles- Panama Canal- Cape Horn- Trans-Panama Migration- 16 inch Gun- Import- Export- Panama Canal Coaling Station- Navigation	

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Engagement Activities:

1. Introduction Activity - Building the Panama Canal -
2. Around Cape Horn Map Activity
3. Difficulty of Cape Horn Youtube Activity
4. Give students the activity to fill out as the video plays
5. Student Led Research Shipping Companies activity
6. Vocab Crossword Activity of the Panama Canal
7. Immigration & The panama Canal, allow students to first read the LOC assigned newspaper and discuss the primary source in groups prior to completion of activity
8. 16- inch Gun activity
9. How the Panama Canal Affected the Economy Activity

Element of 21st Century Learning:

The Panama Canal has caused an immense change within many aspects, such as shipping globalization, immigration, economic effects, military development, while also continuing to revolutionize the world today. However, it has not always been this way. Many ships once had to navigate extremely dangerous water, within the time of many months, delaying Europe's access to the United States. The implementation of the Panama Canal has lessened the journey creating a much faster way to import and export goods. Even today, the canal's system has allowed for many countries to thrive economically, groups of people to thrive socially, and many countries to continue to reach each other faster.

Materials & Preparation Needed:

- Demolition, disease, and death: Building the Panama Canal - Youtube Video
https://www.youtube.com/watch?v=uE_UuHRtXCY
- "Around Cape Horn" Youtube video
<https://www.youtube.com/watch?v=9tuTKhqWZso&t=1703s>
- Library of Congress Primary source Newspaper articles

Instructional Procedures:

Hook/Opener:

Ask students :

- What comes to mind when you see or hear the term Panama Canal?
- Where is the Panama Canal?
- On sticky notes, students will write their ideas (limit each person to a number of notes).
- Put the sticky notes on the board. Read them out loud to the class

1. Introduction to the Panama Canal. Show students the Building the Panama Canal -Demolition, disease, and death: Building the Panama Canal - Alex Gendler Youtube Video: https://www.youtube.com/watch?v=uE_UuHRtXCY

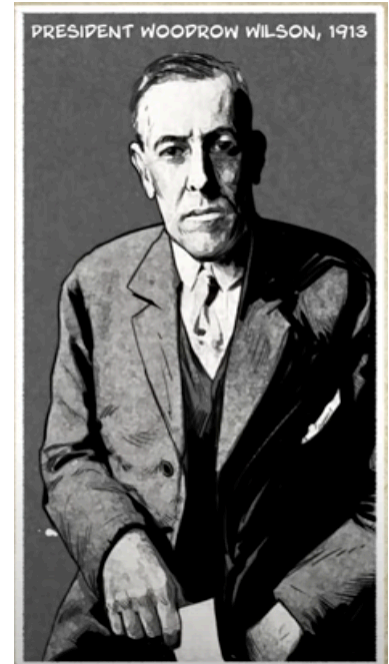
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	<ul style="list-style-type: none">• After the video: Have students finish worksheet• Open discussion about the video
Instructional Sequence: (Include Guided practice Independent practice)	<ol style="list-style-type: none">2. Activity 2 - Difficulty of Cape Horn Activity and Map Students will watch Youtube video "Difficulty of Cape Horn" (https://www.youtube.com/watch?v=9tuTKhqWZso&t=1703s) Give students the activity to fill out as the video plays3. Activity 3 - Shipping Companies & The Panama Canal4. Activity 4 - Panama Canal Vocabulary Crossword5. Activity 5 - Immigration & The Panama Canal, allow students to first read the LOC assigned newspaper and discuss the primary source in groups prior to completion of activity6. Activity 6- Panama Canal & the Military - 16- inch Gun7. Activity 7 - How the Panama Canal Affected the Economy Activity

Adaptations for Diverse Learners:	Visual aids can be used for visual learners. For Spanish speakers all materials could be translated into Spanish.
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Before watching the video, “Dark History: The Panama Canal - Demolition, disease, and death: Building the Panama Canal - Alex Gendler - https://www.youtube.com/watch?v=uE_UuHRtXCY”, answer the following questions in your notebook;

1. What comes to mind when you see or hear the term Panama Canal?
2. Where is the Panama Canal?

After watching the video, answer the following questions in your notebook;







3. Based on the video, name several ways the Panama Canal has affected everyday life of people.
4. Write down any unknown terms or questions you still have about the video or the Panama Canal.

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Education Resources – WWH Fall Scholar 2021- Taite Ines Lesson Plan 2 – Panama Canal – Activity 2 – Difficulty of Cape Horn - The Influence of The Panama Canal Seen on a World Map



Key

-  - Location of The Panama Canal
-  - A ship's starting location
-  - A ship's trajectory prior to the creation of The Panama Canal (before 8/15/1914)
-  - A ship's trajectory after the creation of The Panama Canal (after 8/15/1914)
-  - A ship's final destination! 

Math in The Miles

On average a ship going from Europe to the west coast of the U.S saves 8,000 nautical miles (15,000km) by being able to pass through The Panama Canal.

But, how big is 8,000 nautical miles? Let's do some math!

- 1 Nautical Mile = 1.15078 miles
- 8,000 \times 1.15078 = 9,206.24 miles

To put it into perspective....

Hawaii is 1,522 miles long
 $9,206.24 \div 1,522 = 6.049$

So, the distance we are cutting off from a ship's trajectory by using The Panama Canal is as long as running across Hawaii just over 6 times!!

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Lesson Plan 2 – Panama Canal – Activity 3 – Shipping Companies & The Panama Canal

Student Lead Research Activity

Students need to use a computer with internet access to research and find the answers to the questions below. Write the link for all websites visited after each questions.

1. Identify at least 3 different current day shipping companies that utilize The Panama Canal and list them in your notebook.
2. Determine the country of origin that these ship's are importing or exporting from... is there a pattern?
3. After identifying these shipping companies and their country of origin, find another shipping company from the same area/region that does not use The Panama Canal, list in your notebook.

Post Research Inquiry Questions

1. What can you conclude about The Panama Canal and its present day impact?
2. Compare The Panama Canal's current day impact to its impact when it first opened in 1914. Would you say its impact has changed over the years? If yes, how so?

Student Lead Research Activity

Shipping Companies & The Panama Canal

ANSWER KEY

Research Guiding Questions

Identify at least 3 different current day shipping companies that utilize The Panama Canal and list them below:

- MSC
- Maersk line
- CMA CGM

Determine the country of origin that these ship's are importing or exporting from... is there a pattern?

Maersk line - Denmark

CMA CGM - France

MSC - Switzerland

The Panama Canal is utilized by the world's top three shipping companies. This shows that The Panama Canal allows for imports and exports coming from all over the world. There is a large variety of country representation.

After identifying these shipping companies and their country of origin, find another shipping company from the same area/region that does not use The Panama Canal, list it below.

All shipping companies from the Countries listed above use The Panama Canal.

Post Research Inquiry Question

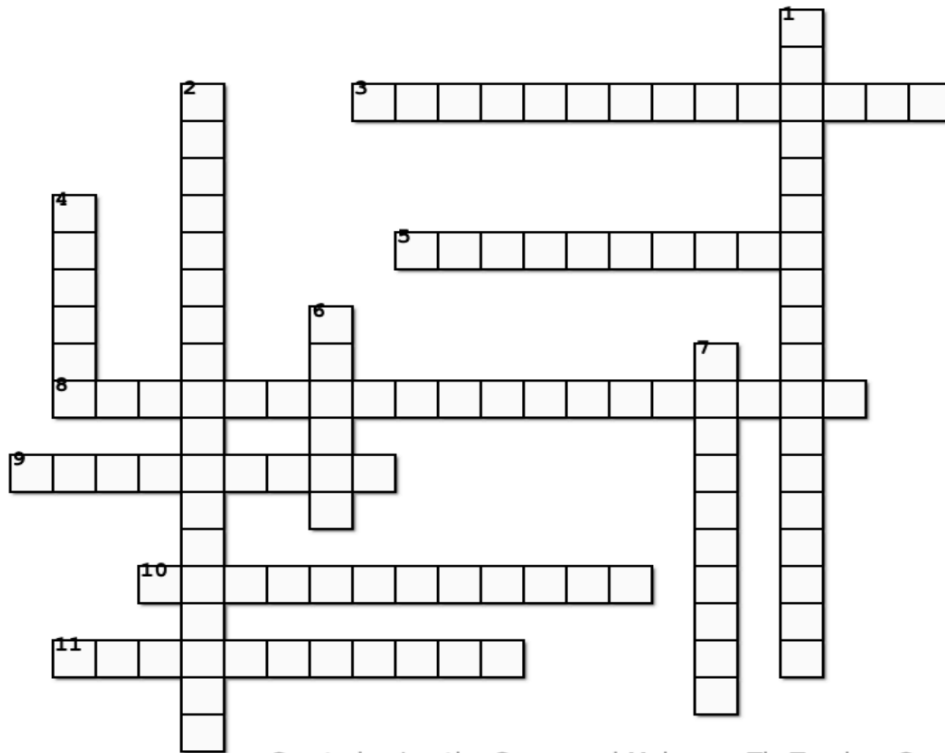
After completing your research, what can you conclude about The Panama Canal and its present day impact? Compare The Panama Canal's current day impact to its impact when it first opened in 1914. Would you say its impact has changed over the years? If yes, how so?

- Present day impact: very large. Many present day shipping companies utilize The Panama Canal
- The influence of this canal continues to grow.
- The Panama Canal has seen the rise of annual cargo traffic from approximate 1,000 vessels transit (ocean going commercial traffic) since opened in 1914 to 12,386 oceangoing vessels transit in 2015.

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Lesson Plan 2 – Panama Canal – Activity 4 – Panama Canal Vocabulary & Crossword



Created using the Crossword Maker on TheTeachersCorner.net

Horizontal

3. a unit used in measuring distances at sea
5. process of accurately determining and controlling the position along a ship's desired course
8. Hundreds of thousands of South Europeans descended upon the Pacific via the Panama Canal.
9. The most southern point of South America, one of the most treacherous passages for boats. Atlantic and Pacific meet here.
10. A vital waterway that connects the Atlantic Ocean with the Pacific Ocean. Allows boats to travel around the world faster.
11. A 200 ton disappearing gun placed on the Panama Canal for protection. It was the biggest gun of its class in 1915.

Vertical

1. A business that transports cargo aboard ships
2. The largest coal receiving and distributing plant in the world in 1916, located on the Panama Canal Zone
4. Bring goods or services into a county from a country abroad for sale
6. send goods or services to another country for sale
7. a boat that is propelled by a steam engine, but is no longer popular today

WORD BANK

Import / Export / Shipping company / Cape Horn / Navigation Nautical Miles / Panama Canal
Trans-Panama Migration (T-P Migration) / 16-inch Gun / Panama Canal Coaling station (PC coaling Station)

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Education Resources – WWH Fall Scholar 2021- Taite Ines Lesson Plan 2 – Panama Canal – Activity 5 – Trans-Panama Immigration Explained

What Historic Newspapers Can Tell Us Today

Answer the following questions in your notebook, before reading the newspaper article dated March 4th, 1914.

1. When you hear the term: Trans-Panama Migration what do you think of?
2. List any key words or phrases that you think are connected to this topic.

Group Work

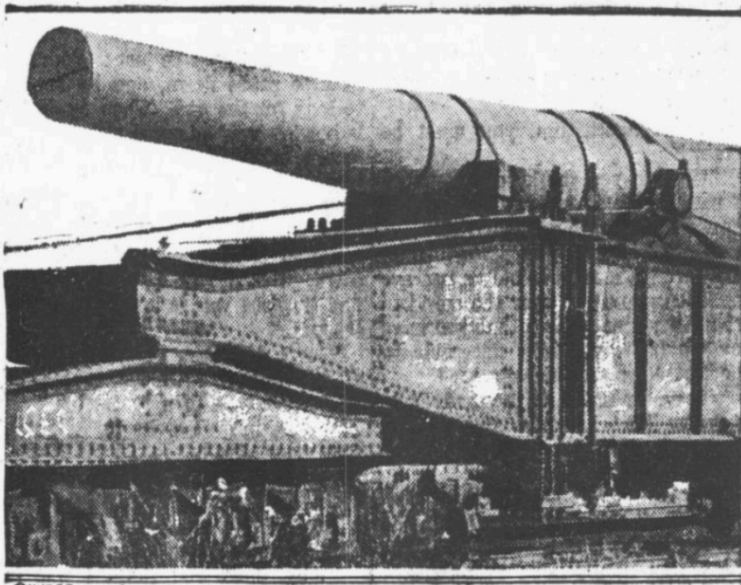
In small groups of 3-4 students, take a few minutes to read and discuss the March 4, 1914 newspaper article.

1. What are the six main nationalities that are part of these "Hordes?"
2. Write down keywords or phrases that you are unsure of after reading the article.
3. Use a computer to research and define them in your notebook.
4. How has the creation of the Panama Canal changed the flow of immigrants?
5. Did the Panama Canal allow these groups of immigrants to migrate easier? How?
6. What political stance or perspective does the writer take on the idea of immigration?
7. How do we see this same negativity being displayed against immigrants today?

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Education Resources – WWH Fall Scholar 2021- Taite Ines Lesson Plan 2 – Panama Canal - Activity 6- Panama Canal & The Military

BIGGEST 16-INCH GUN IN THE WORLD, TO BE USED AT PANAMA CANAL



This is one of the big monsters upon which America will have to rely for protection against any foreign power that may get the notion to seize the Panama Canal. This sixteen inch disappearing gun is the biggest gun of its class in the world and is capable of throwing a projectile twenty-one miles. The gun proper weighs 200 tons and was made some months ago at Watervliet, N. Y., from where it was shipped to Watertown, Mass., to have the carriage fitted. Several times along the way its extraordinary weight spread the rails. Dec. 10th it was shipped to Sandy Hook proving grounds on a train of fourteen specially constructed cars. The gun will, ultimately used in the fortifications at the Panama Canal.

The picture shows the gun on the carriage and the specially constructed cars which were used to transport it.

*Facts about the 16-inch gun every history student should know:

- In 1920 it was the largest coast defense gun ever created in the U.S
- It is a 16-inch disappearing gun
- Hurls shells weighing 2,700 pounds 35 miles
- The mount weighs 850 tons
- The cost of the gun is \$300,000



How The Panama Canal Progressed The U.S Military

Answer the following questions in your notebook.

1. What key elements of the 16-inch gun make it unique?
progression?
2. In what ways is this gun a product of military progression?

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Lesson Plan 2 – Panama Canal - Activity 7- Panama Canal & The Economy P.1

If one considers the thousands of ships full of goods that pass through the Canal every year and the impact that closing the Canal would have on the world economy, one can understand the economic importance of the Canal. Therefore, keeping the Canal open is directly and indirectly important to the United States and to the global economy.

An Important List of the Panama Canal's Direct Affect on the U.S

Economy

- Creates more jobs (new necessity to run and operate the port)
- Transportation runs more efficiently (less time & money)
- Shipping cargo is now faster and easier (no longer necessary to ship around Cape Horn)
- Now cheaper to ship through the canal than to ship through train or truck
- Easy access to a much larger number of trading partners & their products
- Immense impact of the economy through international trade: Panama Canal transports 130 million tons of goods and raw materials
- American economy is most directly affected by the operation of The Panama Canal: nearly 2.7 billion dollars was the toll revenue generated in 2020.

FIRST PICTURE OF FIRST OCEAN STEAMER GOING THROUGH PANAMA CANAL



The Panama Canal's Impact on Panama's Economy

Past & Present

In 1903 Panama declared independence from Columbia in a U.S backed revolution. The U.S and Panama signed the Hay-Bunau- Varilla Treaty. In this treaty the U.S agreed to pay Panama a set number of \$10 million for a perpetual lease on the land of the canal. Until 1999, the U.S paid Panama \$250,000 annually in rent for the canal land. The money that Panama annually received from the U.S is a large factor in the success of Panama's present day economy. However, since 1999 The Panama Canal has been fully owned and operated by the Republic of Panama.



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Lesson Plan 2 – Panama Canal - Activity 7- Panama Canal & The Economy P.2

Take a look at the chart below. Once you think you have a good understanding of the chart be ready to answer the questions that follow.

• See the following table:

Traffic of the Panama Canal during the first 10½ months of operation.

Months	Eastbound		Westbound		Total		Vessel tonnage	
	Ves-sels	Cargo	Ves-sels	Cargo	Ves-sels	Cargo	Gross tons	Net tons
1914								
August . . .	11	62,178	13	49,106	24	111,284	120,282	85,978
September . .	30	180,276	27	141,762	57	322,038	303,446	221,059
October . .	40	253,288	44	168,069	84	421,357	461,104	328,216
November . .	38	242,291	54	206,510	92	448,801	452,550	322,731
December . .	57	271,219	43	179,235	100	450,454	485,672	344,294
1915								
January . .	54	240,925	44	208,082	98	449,007	490,571	347,212
February . .	53	276,078	39	150,987	92	427,065	455,344	322,862
March . . .	80	417,610	57	217,447	137	635,057	675,281	475,984
April	60	285,457	59	237,384	119	522,841	569,877	404,539
May	75	332,174	67	246,534	142	578,708	703,805	492,350
June	60	282,561	83	320,619	143	603,180	698,855	497,810
Total . .	558	2,844,057	580	2,125,735	1,088	4,969,792	5,416,787	3,843,035

Economic Aspects of the Panama Canal

Author(s): G. G. Huebner

Source: *The American Economic Review*, Dec., 1915, Vol. 5, No. 4 (Dec., 1915), pp. 816-829

Published by: American Economic Association

Stable URL: <https://www.jstor.org/stable/1809632>

Are you surprised by any data within the chart, given that this data is taken only from the first 10.5 months? Why?

What does this data tell you about the impact that The Panama Canal has on the Economy? Reference specific numbers and explain their influence or insight on the present day economy.