

A Highway of Water

(#1) In 1849, travelers going from the East Coast to the West Coast of the United States had three choices. They could go by wagon across America's sometimes dangerous prairie land.

They could travel by sea to Panama, cross Panama by foot, and then sail the rest of the way to the West Coast of the United States. The third choice was to board a sailing ship in New York bound for California. This route led down the Atlantic Coast, around the southern tip of South America into the Pacific Ocean, and then north up the Pacific Coast to California. The 15,000-mile journey took months. Severe weather, which is common at the tip of South America where the two oceans meet, could add as much as five extra months to the trip.

The Solution

(#2) Could there be any other way to travel from the Atlantic to the Pacific? The answer was a canal. A canal is a human-made waterway. It provides passage between two natural bodies of water. For centuries, people around the world have been using human-made waterways to move goods and people from one place to another. A canal is a highway made of water.

(#3) In the 1850s, the United States and Great Britain negotiated a treaty for the rights to build a canal through the Central American Republic of Nicaragua. However, this canal was never built. The project did not make it beyond the planning stages.

(#4) Panama, a small country connecting Central America to South America, was another logical option for a canal. It is located a little farther south than Nicaragua. At its narrowest part, Panama is barely 50 miles wide. The Atlantic Ocean is on the eastern side of Panama, and the Pacific Ocean is on the western side. With a canal in Panama, the trip from New York to California would be about 8,000 miles shorter than sailing around South America. Travel time could be three months instead of eight months.

The First Attempt to Build the Panama Canal

(#5) In 1879, France began to build a canal across Panama. This project was led by Ferdinand de Lesseps. He was the builder of the Suez Canal in Egypt. He was experienced, and the French government felt that he could get the job done.

(#6) Unfortunately, problems began as soon as construction started. It rained every day, causing the soil to become heavy and sloppy. Temperatures climbed as high as 130 degrees. Tropical diseases such as yellow fever and malaria caused illness or death to the majority of workers. These complications put a great deal of stress on the project. The money allotted to build the canal quickly ran out. In 1899, France abandoned the project.

The United States Decides to Finish the Panama Canal

(#7) The U.S. Congress decided to finish the canal. The U.S. government paid \$40 million to France for the completed work and abandoned equipment. In 1903, after some negotiating, a treaty between the United States and Panama was signed paying Panama \$10 million for a 10-mile-wide strip of land for the canal. This treaty also guaranteed \$250,000 to Panama each year for use of its land and ensured its independence. This deal was viewed as a major foreign policy achievement at the time.

(#8) In November 1904, American workers began completion of the Panama Canal. American officials wanted to avoid the problems that caused France to abandon the project. They wanted to protect workers from disease. An engineer, John F. Stevens, was sent to the work camp in Panama. He began building hospitals as well as water and sewage systems making the working conditions sanitary. He supported the camp doctor's efforts to fight mosquitoes, the cause of malaria and yellow fever. All of these efforts helped to keep the workers healthy and focused on the task at hand.

Using the Panama Canal

(#9) Since the water level of the Pacific and Atlantic Oceans is not the same, a system of locks and gates had to be built in the canal. These locks are a pathway for ships to move from one ocean to the other. A lock is a giant box made of concrete. A ship must pass through three locks in the Panama Canal. Each lock holds millions of gallons of water. A ship moves into a lock, which is filled with water. Water is pumped into the lock or out of the lock. This raises or lowers the ship to the level of water in the next lock. The gates open, and the ship moves into the next lock.

(#10) By early 1913, the canal was nearly complete. It took several months to fill the canal with water. On September 26, 1913, an old tugboat was the first ship through the canal. Thousands of people watched and cheered. The locks worked perfectly.

(#11) In modern times, approximately 14,000 ships make the 50-mile trip through the canal each year. On average, the trip through the canal takes a ship 8 to 10 hours. The ship captain does not steer the ship through the canal. A specially trained canal pilot takes control of the vessel and expertly guides it through the canal.

(#12) Time, money, and possibly even lives have been saved as ships use the shorter route from ocean to ocean provided by the canal. The Panama Canal, a highway of water, is a phenomenon.

Teacher	Subject	Grade
Topic	Date	Period
Objective (s)		
Assessment Task		

BEFORE Reading, Viewing, or Listening
<i>How will the students be prepared for reading, viewing, or listening?</i> <i>Background knowledge? Vocabulary? Previewing? Purpose?</i>

During Reading, Viewing or Listening
<i>What are students doing while reading, viewing, or listening?</i> <i>Answering questions? Generating questions/answers? Taking notes?</i> <i>Completing graphic organizer? Using "Getting the Gist" strategy?</i>

After Reading, Viewing or Listening
<i>How will students respond to content?</i> <i>Discussing? Writing Summary? Answering written questions? Comparing?</i>

Teacher: Archer	Subject	Grade
Topic: Trade/ Panama Canal	Date	Period
Objective (s) Students will be able to: <ul style="list-style-type: none"> - Explain why the Panama Canal was built. - Summarize the sequence of attempts to build the Panama Canal from 1881 to 1914. - Describe the complications in constructing the Panama Canal. - Explain the importance of the Panama Canal today. 		
Assessment Task Write three paragraphs about Panama Canal when given three topic sentences.		

BEFORE Reading, Viewing, or Listening
<i>How will the students be prepared for reading, viewing, or listening?</i> <i>Background knowledge? Vocabulary? Previewing? Purpose?</i>
Background Knowledge and Vocabulary -Panama-Panama Canal - complication - Canal - Gatun Lake - Locks - Trade routes - Cargo Ships –Cruise Lines

During Reading, Viewing or Listening
<i>What are students doing while reading, viewing, or listening?</i> <i>Answering questions? Generating questions/answers? Taking notes? Completing graphic organizer? Using “Getting the Gist” strategy?</i>
After each segment, the teacher will ask text-dependent questions. Students will share answers with partner using sentence starter. Individuals will be called on randomly to share their answers.

After Reading, Viewing or Listening
<i>How will students respond to content?</i> <i>Discussing? Writing Summary? Answering written questions? Comparing?</i>
Students will write three paragraphs about the Panama Canal.