

# The Shortest Path

Christopher Maag



What happens when you're standing in one spot, and you want to visit a different spot, but there's water in the way? That's the problem people faced for hundreds of years in the area that is now New York City. On one side of the water is Brooklyn. On the other side is Staten Island.

In between is a body of water called the Verrazano Narrows. It's called Verrazano after the first European who sailed there, Giovanni da Verrazano, who explored America in 1524. And it's called "the Narrows" because it's the place where Brooklyn and Staten Island come closest to touching.

But the Verrazano Narrows isn't really so narrow. The water is almost a mile wide, and it's more than 100 feet deep. For a long time that wasn't a problem, because only a few people lived in Brooklyn and Staten Island. When they wanted to talk to each other, they simply climbed into their boats and sailed across.

But by the 1800s, people were very annoyed with the Verrazano Narrows. Lots of people lived and worked in Staten Island and Brooklyn. Taking a boat every time was very slow and expensive, and in bad weather the ferries couldn't sail at all.

In 1888, the Baltimore & Ohio Railroad announced it would dig a tunnel under the water for freight trains. Tunnels cost a lot of money to build, though, so that plan didn't work. In the early 1920s, New York's leaders decided to build so that subway trains could carry people under the Narrows. They paid workers and started digging the tunnel, but the job was too expensive, and they gave up.

Other people wanted to cross the Narrows by building a bridge. In 1910 Charles Worthington proposed a bridge that would hang 260 feet above the water. Six years later, an engineer named David Steinman proposed a taller bridge. But leaders of the military feared the bridges could block big Navy ships entering New York Harbor. So neither bridge was built.

Finally, after World War II, there were so many people living in New York City that leaders decided Brooklyn and Staten Island needed a direct connection. Since tunnels were so expensive, they decided to build a bridge. They hired engineer Othmar Ammann to design it. Ammann decided the bridge should have two separate roadways stacked on top of each other. Both roadways would hang in the air from thick steel cables, supported by two giant steel towers.

Construction took five years, employed 12,000 workers, and cost \$320 million. When it opened in 1965, the Verrazano Narrows Bridge was the longest of its kind in the world. About 190,000 cars and trucks travel the bridge every day.

Sometimes getting from one place to another is easy. You simply walk there. Other times it looks easy, but getting there is actually quite hard. In New York, people tried to solve the problem of crossing the Verrazano Narrows by sailing boats, digging tunnels and dreaming of bridges. Figuring out a good solution took 440 years.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. In this passage, people needed a way to get between what two places?

- A** Brooklyn and Manhattan
- B** Queens and Brooklyn
- C** Brooklyn and Staten Island
- D** Manhattan and Staten Island

2. The problem explained in the passage was the difficulty of getting from one side of the Verrazano Narrows to the other. What was the solution?

- A** a tunnel
- B** a ferry
- C** a bridge
- D** a train

3. Read the following sentences: "In 1888, the Baltimore & Ohio Railroad announced it would dig a tunnel under the water for freight trains. Tunnels cost a lot of money to build, though, so that plan didn't work. In the early 1920s, New York's leaders decided to build so that subway trains could carry people under the Narrows. They paid workers and started digging the tunnel, but the job was too expensive, and they gave up."

Based on the evidence above, what conclusion can be made?

- A** New York's leaders preferred subways to trains as a solution.
- B** The ground near the Narrows was too hard for digging tunnels.
- C** Cost was an obstacle in early attempts to connect Brooklyn and Staten Island across the Narrows.
- D** Subway tunnels are more expensive than freight train tunnels.

4. Based on the passage, why did leaders decide Brooklyn and Staten Island needed a direct connection after World War II?

- A** The decreasing population of people living in Brooklyn and Staten Island made it more important to find a faster, more reliable way across.
- B** The increasing population of people living in Brooklyn and Staten Island made it more important to find a faster, more reliable way across.
- C** New York City had more money to invest in building a proper bridge to connect Brooklyn and Staten Island after World War II.
- D** New York City had less money to invest in building a proper bridge to connect Brooklyn and Staten Island after World War II.

5. What is this passage mainly about?

- A accommodating changes to New York's culture
- B finding an efficient way to cross the Verrazano Narrows
- C balancing the needs of the military with the needs of civilians
- D comparing and contrasting subway and train tunnels

6. Read the following sentences: "In 1910 Charles Worthington **proposed** a bridge that would hang 260 feet above the water. Six years later, an engineer named David Steinman **proposed** a taller bridge. But leaders of the military feared the bridges could block big Navy ships entering New York Harbor. So neither bridge was built."

As used in the passage, what does the word "**proposed**" mean?

- A began
- B suggested
- C built
- D crossed over

7. Choose the answer that best completes the sentence below.

First, people crossed the Narrows in boats. Next, they tried building tunnels underneath. Then, they proposed two different ideas for bridges, but military leaders objected. \_\_\_\_\_, in 1965, the Verrazano Bridge was opened.

- A Obviously
- B Finally
- C Actually
- D Additionally

8. Why did leaders of the military (i.e., the Navy) oppose the first two planned bridges over the Verrazano?

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9. Describe three ways people tried to solve the problem of crossing the Verrazano Narrows.

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10. In the passage, the author says that people have wanted to cross the Narrows more quickly since at least the 1800s. Why did it take until 1965 for leaders to find a good solution? Use evidence from the text to support your answer.

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## Teacher Guide &amp; Answers

Passage Reading Level: Lexile 930

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8. Why did leaders of the military (i.e., the Navy) oppose the first two planned bridges over the Verrazano?

**Suggested answer:** They feared the bridges could block big Navy ships entering New York Harbor.

9. Describe three ways people tried to solve the problem of crossing the Verrazano Narrows.

**Suggested answer:** People tried to solve the problem of crossing the Verrazano Narrows by sailing boats, digging tunnels and proposing different bridge designs.

10. In the passage, the author says that people have wanted to cross the Narrows more quickly since at least the 1800s. Why did it take until 1965 for leaders to find a good solution? Use evidence from the text to support your answer.

**Suggested answer:** Boats were slow and couldn't cross in bad weather, but tunnels were expensive, and before WWII, military leaders feared that bridges would block Navy ships. After leaders finally decided to build the bridge after WWII, it took five years to build.