How Suspension Bridges Are Built

By Kelli and Aimee

What Is a Suspension Bridge?

Suspension Bridge- a bridge in which the weight of the deck is supported by vertical cables suspended from larger cables that run between towers and are anchored in abutments at each end.



History of the Suspension Bridge

The first bridge was made in 1777. Then they decided to build something better than the plane old plank bridge in 1998. They can up with the suspension bridge. From that time on they have improved how the bridge works and functions.





Old suspension bridge

New suspension bridge

The Structure of a Suspension Bridge

The suspension bridge has suspension cables that run between towers and from the vertical suspender cables that hold the deck. These suspension cables hold most of the weight. This means that the cables need to be very strong. Suspension bridges can be from 2,000 to 7,000 feet long. This is a lot longer that other bridges. They also tend to be the most expensive bridges to build. Because of this great structure we have suspension bridges that have lasted many years, such as Roebling's Delaware Aqueduct.

Bridges

The book we used was *Bridges by Joanne Mattern* you can find the book in the Sandyston-Walpack School. We learned a lot from this book. If you go to the section *History of bridges* you can find were we got our info from. This will include what we wrote on the slide "History of suspension bridges".

Suspension Bridge-History, Facts, and Construction

One of the websites we used was <u>Suspension Bridge-history, facts, and</u> <u>construction.</u>This website is all about suspension bridges. This is where we found the majority of the information in our History of Suspension Bridges slide. It gives a lot of information about suspension bridges and their history. If you are ever wanting to learn a little more about bridges you can definitely check out this website.

HowStuffWorks Videos Understanding Bridges

The video we used would be <u>https://www.youtube.com/watch?v=rbrhwTvrxHk</u> we learned how the bridges are made. We also learned that many people use this bridge and it is very important to the world today.

Resources

- <u>https://www.quora.com/How-are-bridges-built-over-water</u>
- <u>https://www.bigrentz.com/blog/how-are-bridges-built</u>
- <u>http://www.historyofbridges.com/facts-about-bridges/suspension-bridges/</u>
- Maker lab by Jack Andraka
- <u>http://design-technology.org/suspensionbridges.htm</u>
- https://www.youtube.com/watch?v=rbrhwTvrxHk