A pontoon bridge is a bridge built using floats to support a continuous flat deck over water. Most pontoon bridges are temporary and used in wartime and civil emergencies, and were built by Civil War armies to cross rivers. Pontoon bridges have been used for centuries all over the world. In 1864, General Ulysses S. Grant used pontoon bridges between June 13 and 17, 1864, to move 100,000 men, 5,000 vehicles, and 58,000 animals across the James River in Virginia. The pontoon bridge measured 2,200 feet, the longest pontoon bridge in military history. Check out the activity below, where you can build your own pontoon bridge!

**Materials**
- 3 Toilet paper tubes
- 14 Popsicle Sticks
- Glue stick or bottle of School Glue
- One sheet of 8.5 x 11” paper
- Optional: You can use scissors, pencils, crayons, markers, toy soldiers, cannons, horses or wagons to decorate your bridge

**Instructions**

1. First, look at the pictures of the pontoon bridges. How are the bridges made? What materials did they use? How are the materials you have been given similar to those in the picture. How will you use them?
2. Use the toilet paper tubes as the floats to support the structure of the bridge. The floats should be placed on their sides and spaced across the piece of paper as far apart as a popsicle stick.

3. Place a line of glue across the top of the two floats. Then place the popsicle sticks on the glue line on top of each float to serve as the platform of the bridge.
4. Continue to add popsicle sticks to your pontoon bridge.

5. Use the third toilet paper tube and follow the same directions to make another bridge section over the river.
6. Congratulations!
The bridge you have built will allow the soldiers and supplies of the Army to safely cross the river. Get ready for a big promotion!
What else did engineers do during the Civil War?

Engineers had many important jobs during the Civil War. They planned and built forts to protect important cities like Washington, DC. They built roads and bridges for the soldiers, wagons and trains to travel over. Engineers also surveyed the land and made accurate maps for the Army.