

Activity #18 (Part 1 of 3)



Building Bridges: Scavenger Hunt



Directions: Use the “*Building Bridges: The Basics*” handout (from Activity #9) and the following websites to “hunt” for the information to complete this sheet.

www.pbs.org/wgbh/nova/bridge/meetarch.html
www.pbs.org/wgbh/nova/bridge/meetbeam.html
www.pbs.org/wgbh/nova/bridge/meetcable.html
<http://www.pbs.org/wgbh/nova/bridge/meetsusp.html>
www.tfrc.gov/pubrds/summer95/p95su23.htm
<http://www.cse.polyu.edu.hk/~ctbridge/arch/arch04.htm>
<http://www.msnbc.msn.com/id/20079534/>

1. What is the oldest type of bridge? _____
2. The Pont du Gard aqueduct, located in _____ was built by the Roman Empire around _____. It is held together by mortar only in its top tier. The stones in the rest of the structure stay together by the sheer force of their own weight. Pont du Gard means literally _____.
3. What is the name of the first American arch bridge to be constructed from segments of pre-cast concrete, a highly economical material? _____
4. On August 3, 2007, the I-35 Bridge in Minneapolis collapsed into what body of water? _____
5. What is the simplest and the least expensive kind of bridge to build? _____
6. Lake Ponchartrain Causeway, the longest continuous span bridge in the United States, is located in what state? _____
7. What is the most expensive type of bridge to build? _____
8. The United States spends at least _____ per year for highway bridge design, construction, replacement, and rehabilitation.

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9. What is a major problem for suspension bridges? _____

10. The collapse of the Silver Bridge in December of 1967 initiated what program?

*Activity adapted from: EarthWalk Communications, Inc.
www.earthwalk.com*

Activity #18 (Part 3 of 3)

Building Bridges Scavenger Hunt (Answer Key)

1. What is the oldest type of bridge?

ARCH

2. The Pont du Gard aqueduct, located in the **south of France** was built by the Roman Empire around **the year 19 BC**. It is held together by mortar only in its top tier. The stones in the rest of the structure stay together by the sheer force of their own weight. Pont du Gard means literally **bridge of the Gard (river)**.

3. What is the name of the first American arch bridge to be constructed from segments of pre-cast concrete, a highly economical material?

The Natchez Trace Bridge in Franklin, Tennessee

4. On August 3, 2007, the I-35 Bridge in Minneapolis collapsed into what body of water?

The Mississippi River

5. What is the simplest and the least expensive kind of bridge to build?

A beam or "girder" bridge

6. Lake Ponchartrain Causeway, the longest continuous span bridge in the United States, is located in what state?

Louisiana

7. What is the most expensive type of bridge to build?

Suspension

8. The United States spends at least _____ per year for highway bridge design, construction, replacement, and rehabilitation.

\$5 Billion

9. What is a major problem for suspension bridges?

Wind

10. The collapse of the Silver Bridge in December of 1967 initiated what program?

National bridge inspection