

Civil Engineer

What do the Golden Gate Bridge, Hoover Dam, and the Grand Canyon Skywalk have in common? They are all examples of awesome civil engineering!

Civil engineers design and maintain the public places we share. When it comes to the types of projects that civil engineers work on, you need to think big!

(Feel free to use the back of this sheet for longer answers)



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What Do Civil Engineers Do?

Civil engineers design and maintain the public places we share. This includes highways, bridges, and water and energy systems. It also includes ports, railways, airports, and subway systems.

You'd have to travel all the way to Egypt and go back in time thousands of years to see some of the first known civil engineers in action. Long before the days of big trucks, cranes, and fancy tools, they built three amazing pyramids that were over 480 feet (146 meters) tall. One of these pyramids still stands today in Giza.

Designing today's modern wonders requires at least a 4-year college degree in civil engineering. You can start preparing now by taking lots of math classes.

CHALLENGE #1: *If you had this career...*

What kind of training would you need?

Where could you find a job?

How much money could you earn?

Who would you help and how would you make a difference?

Why would (or wouldn't) you like doing a job like this?

CHALLENGE #2: *Think Tank*



Civil engineers get inspiration from any places--other engineers, nature, history, and other sources. One surefire source of inspiration is the Seven Wonders of the World.

Use an Internet search engine to find information and images using search terms like "seven wonders of the natural world," "seven wonders of the ancient world," or "seven wonders of the modern world." Each search will yield different types of results--and inspiration.

Pick a favorite list of wonders and make a poster or flowchart showcasing each wonder. What makes each place so amazing? What can civil engineers learn from them? Label each entry with your answers and ideas.