

Engineering

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A Google search of the definition of engineering yields many definitions for the word. And there are many types of engineering. This workshop will focus on structural engineering - in other words engineering as it applies to the construction of various structures.

Before coming to the workshop on Saturday, explore the following types of structures. Be sure to check out the basics of each structure, complete the accompanying lab, and challenge. Also be sure to check out some of the structures that have been built in this category.

Bridges: be sure to check out the Tacoma Narrows Bridge as well as others that are listed.

Domes: Compare the Astrodome and the US Capital dome.

Skyscrapers: The Empire State Building was the tallest building for 41 years. Why do you think it held this record for so long?

Dams: Read about the world's largest dam, now under construction in China.

Tunnels: Be sure to check out the Chesapeake Bay Bridge Tunnel. I remember going for a Sunday drive, just to go over this "new" engineering feat.

Come to the workshop prepared to build using what you have learned about forces, shapes, materials and loads.