

# Student Link

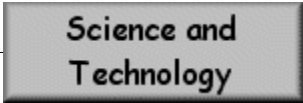
## Internet Treasure Hunt for Grade 5 (Science & Technology / Structures)

Student Name: \_\_\_\_\_

### INSTRUCTIONS

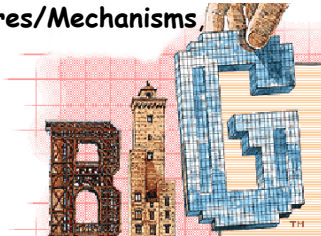
A. Every building or structure that made is subject to forces that are destructive to it. It's important for designers and builders to be very familiar with those forces in order to make structures that can withstand those forces for many years. Let's have a look.....


B. Click on the **Grade Five** door.



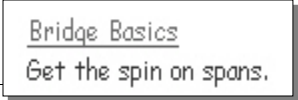
C. Now click on **Science and Technology**

D. Under "**Forces Acting on Structures/Mechanisms**", click on **PBS: Building Big**.



1.  What are the four types of structures named in the title?


2. Under the web page title click on "**Bridges**". Now click on "Bridge Basics" and read the page.



3. Name four types of bridges and draw a small picture that illustrates each type:

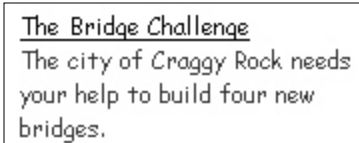
B \_\_\_\_\_

T \_\_\_\_\_

A \_\_\_\_\_


S \_\_\_\_\_


4. Certain areas and conditions require specific bridge designs. Click on "**The Bridge Challenge**" to see if you can guess the best bridge to meet the need.

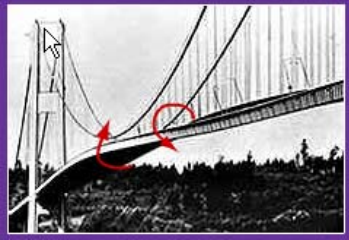


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5. Now it's time to take a closer look at those forces.....

6. On the "Building Big" main page, click on 


7. Now click on 



8. There are five different forces listed here. Click on each one to learn more. As you do so, record your findings in the table below.

Type of Force	Proper Name	What is Does
Squeezing	Compression	It causes structures to become shorter.

9. Forces aren't the only thing that can damage a structure. Every builder and designer must understand the loads that a bridge must withstand on a daily basis. Click on Loads to learn more!

10. What are the seven "loads" that designers and builders must deal with? 

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11. Read about all load types. Which type of load do you think is the most difficult for builders and designers to solve? Why?

12. Which type of load do you think is the easiest for builders and designers to solve? Why?



13. When you're done try out the  and the  tool!