



Webquest- Part 1

Using the website given in class, research the answers to the following questions:

List the four types of Bridges mentioned on the "Building Big" homepage.

Types of Bridges

Describe two characteristics of each of the types of bridges mentioned above.

Click on the "Bridge Challenge" and take the test.



Unit III Structure

Build'em & Bust'em

Webquest - Part 2

Using the website given in class find your way to the Forces Lab and research and answers to the following questions:

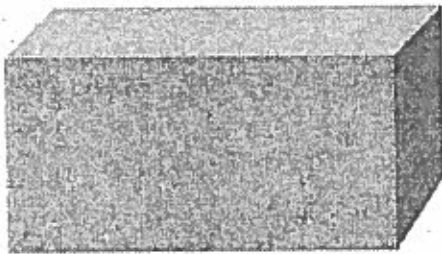
In the spaces below list the 5 **FORCES** at work in different types of bridges. Above each draw the direction, using arrows, that each force takes when it is in action.



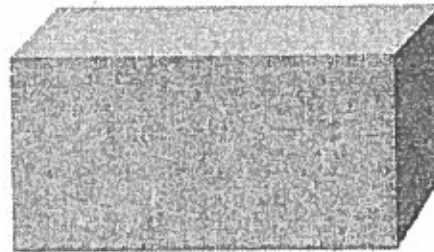
1 _____



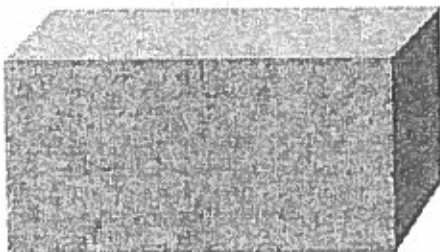
2 _____



3 _____



4 _____

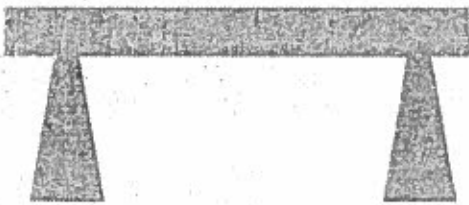


5 _____

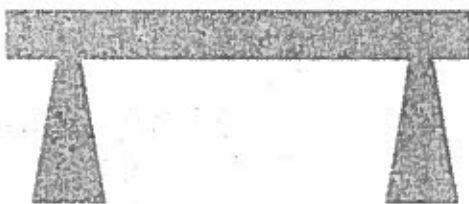
Using the website given in class find your way to the Forces Lab and research and answers to the following questions:

In the spaces below list 7 loads or external forces that will affect a bridge's strength. Above 6 of these forces draw additional support where needed to overcome the weakness.

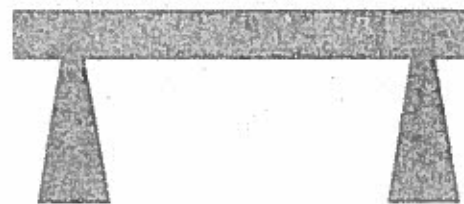
1 _____



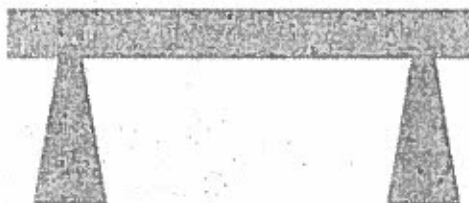
2 _____



3 _____



4 _____



5 _____



6 _____

7 _____

Unit III Structure

Build'em & Bust'em

Webquest - Part 3

Using the website given in class find your way to the Forces Lab and research and answers to the following questions:

List the 8 types of materials that might be used in building bridges

Give 1 positive, 1 negative, and 1 application of each material.

1. material _____
positive _____
negative _____
application _____

2. material _____
positive _____
negative _____
application _____

3. material _____
positive _____
negative _____
application _____

4. material _____
positive _____
negative _____
application _____

5. material _____
positive _____
negative _____
application _____

6. material _____
positive _____
negative _____
application _____

7. material _____
positive _____
negative _____
application _____

8. material _____
positive _____
negative _____
application _____

In the space below draw three common shapes used in bridge building. Include arrows on each shape to illustrate the direction of the force when a load is applied.

1.

2.

3.

Which shape can hold the most weight? _____

Which shape is the weakest? _____