Bridge Building

Name: _____

Problem: _____

_____

Key Words: beam, girder, plate, tubular

Hypothesis: _____

_____

_____

Materials:

bridge challenge sheet
scissors
ruler
2 blocks - abutments
various weights

Procedures:

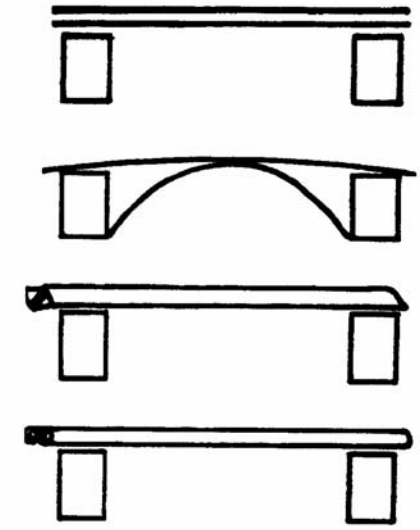
1. Cut 10 strips of paper - 18cm long by 4cm wide

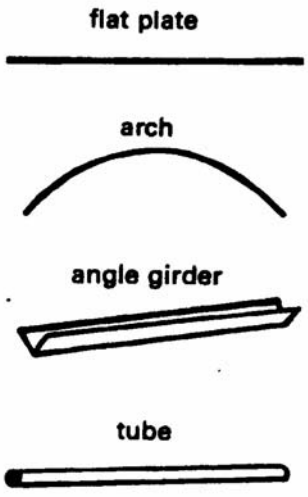
2. Study the pictures at right

3. Set the blocks on the challenge sheet in the spaces provided.

4. Test each of the four bridge designs to determine the maximum load each can handle before collapsing.

5. Record the maximum weight in the table below.





Bridge Style	Flat Plate	Arch	Angle Girder	Tube
Weight				

6. Which bridge type held the greatest load? _____

7. What characteristics of the bridge allowed it to hold the greatest load? _____

_____

_____

_____

_____

8. What are the disadvantages of the other bridge types used in this exercise? _____

State Your Conclusions (tell whether your hypothesis held true, answer the problem, tell what you learned, and apply this to a real world situation)