

Bridge Engineering Project

You (**no partner**) will construct a balsa wood and string bridge that spans a 42 cm gap from approximately 10-36"x1/8"x1/8" pieces of balsa wood and 2.0m of 4lb test string. Glue can only be used on joints. Excessive glue must be cut off with a razor. The bridge must accommodate a 20cmx 5cm x 2cm roadbed. A 1cm bolt must be able to pass through the bottom of the bridge and the road bed and be connected with a 1.5cm nut on the top. Please see example in B145 or Grainger. It will be due on the last class day. If you lose of or break your sticks you will have to go to hobby lobby or another store and replace them at your cost. **No bridge will be started in Grainger after Dec. 11.**

Bridge Inquiry Research Project Grading Sheet

Your question. What was your design trying to test? How did you attempt to answer your question? (An example might be why did you make it a particular shape?) Turn this part into instructor on Nov. 26 or 27. Mr. U will need to see this.	5 pts.
Identify variables, explain basic physics with equations. (Force Diagram with sketch of bridge on back of this sheet.)	10 pts.
Conclusion: Statement of results with calculation of efficiency. What would you change to improve your bridge?	10 pts.
Aesthetically pleasing	5 pts.
Done on Time	10 pts.
Design fits research question.	5 pts.
First place (efficiency) 5pts, Second – 4.5pts, Third – 4pts...	5 pts.

Total _____