Santa’s Bridge Problem

Tis the season, and Santa needs your help. The bridge leading out of his North Pole workshop is in dire need of replacement, and he’s calling upon your engineering skills to help him solve the dilemma.

Your job is to build a bridge using pasta and glue that can span the gap Santa needs to cross to help get his sleigh off and running. Keep in mind, Santa’s sleigh can weigh quite a bit, so you’re going to have to build a pretty strong bridge to support the load. Keep in mind some of the things you have read about bridge building as you come up with your design.

The Rules:

* Use uncooked pasta (I recommend a linguine or fettuccine – wider noodle) and glue (hot glue works well, but any type of glue you have should suffice – don’t use a glue stick).
* The bridge must be able to span 7 inches (or about 18 cm) so make it long enough to cover that distance. It should be a minimum of 2.5 inches (approx.. 6 cm) wide, but no wider than 4 (10 cm) inches. The bridge should be at least 2 inches high. It should be self-supporting/free standing.
* The bridge should weigh approximately no more than one-fourth of a pound (that is ¼ of the average 1 pound pasta box). While we will not be having a weigh-in, this is more of a guideline out of fairness. Don’t use the entire box of pasta in crafting the bridge. That would be a bit unfair.
* Feel free to decorate and color your bridge as you see fit.
* Bridges are due in school by Thursday, December 20th. We will be testing the strength of the bridges during our holiday celebration on Friday the 21st.

 