

Engineering with Pasta - The Spaghetti Water tower

In-Class Team Competition:

Use 20 sticks of (uncooked) spaghetti and 24 inches of adhesive tape to construct the strongest water tower structure that you can.

Additional Problem Constraints:

• Fasten the base of the structure within a 5-inch square horizontal area cardboard as indicated in Fig. 1. Your structure may not touch anything other than air outside this 5x5 inch patch. The tower height must be 10 inches tall. The top of the tower must be able to support a 3.5 inches wide water tank.

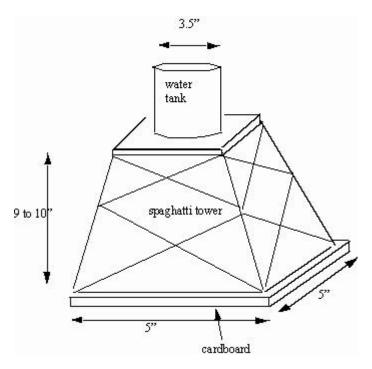


Figure 1. Base of spaghetti water tower.

- Design and build the structure in 30 minutes.
- You may exchange no more than 3 broken spaghetti sticks for new, unbroken sticks.

Judging:

We will see how much weight your tower can hold. The winners get 2% extra credit points.