

grade

The Tower Game

Timeline

- 0:05 – Introduction
- 0:05 – Tower design
- 0:15 – Tower construction
- 0:05 – Demonstration, Final remarks

Overview

The objective of the game is to construct from index cards and masking tape a tower strong enough to support the weight of a brick. The tower must be at least 15 inches tall and it must support the brick for at least 10 seconds.

The winning tower is the one that meets these criteria *and* is the least expensive. Each index card costs \$5000, and each yard of tape costs \$1000. The total cost of the tower is the sum of all material purchased for its construction. For example, if a team purchases 6 index cards and 3 yards of tape, but only uses 4 index cards and 2 yards of tape, the cost of the excess material is still included in the final sum.

Rules

- Material cannot be purchased until the 5-minute design period is over
- Purchased material CANNOT be returned
- Teams cannot test their tower with the brick. However, team members can hold the brick with their hands to get an idea of how much it weighs.
- The tower need not consist of a solitary tower, but can also be an assortment of towers. There are no restrictions on the design of the tower.

Demonstration

Once the allotted construction time is over, a team may no longer touch their tower. The game moderator will bring the brick to each team, one by one, and hand it to a designated team member. The team member will then place the brick on the tower, and notify the moderator when to start the stopwatch. As soon as the brick falls off the tower (the precise moment is at the discretion of the moderator), the time is stopped. If the time is less than 10 seconds, the tower is disqualified. The winning tower is that which holds the brick for more than 10 seconds. If more than one tower supports the brick for more than 10 seconds, the taller tower wins.