AEROFILIA

Materials Required:

* Spaghetti
* Glue
* Weights
* Tapes

Time duration: 2 hrs

Description:

Design a bridge using spaghetti under the given dimensions. Weights will be placed on the top parts of the bridges. The team with a bridge handling the maximum load wins. A complete bridge should contain no other materials than spaghetti and the glue or tapes provided. Each team will be provided spaghetti at the beginning of the event.

Registration:

* Team size: 2-3

Phases of competition:

* Design and construction phase: Within the specified amount of time, a bridge is supposed to be designed and constructed to support weight.
* Judging: The bridges will be judged on the basis of their structure stability by testing the weight that can be handled.

Guidelines:

* Bridges must be constructed entirely using the spaghetti provided.
* Ensure to complete the model designing and preparation before specified time
* Bridges must adhere specified dimensions
* Loads will be incrementally increased until the bridge breaks
* A standard, wood #2 pencil will be supplied prior to the event beginning. This pencil must be incorporated into the bridge so that the pencil is located within the center third of the span. The exact location of the pencil is up to the team. A bucket will be attached to a hook placed on the pencil to hold the loading weights in the testing phase. Clearance should be provided such that the hook can be placed on the pencil without obstruction from other truss parts. The pencil must rest on both sides of the truss.
* The bridge will be free-standing and must span two level surfaces which are 35 cm apart. Maximum length of the bridge will be 40 cm.
* At the competition, bridges will be loaded with increasingly greater amounts of weight until they fail. After a bridge fails, team members are responsible for cleaning up the spaghetti from their bridge.