

MYSTERY ARCHITECTURE

1. **DESCRIPTION:** This event is designed to test the students' ability to think on their feet. At the competition, they will be given a bag of building materials and instructions to build some sort of device that can be tested. Teams will be asked to build either a tower, bridge, or a boat. The device that holds the weight for 15 seconds which is either the tallest (tower) or great span bridge or boat wins.

A TEAM OF UP TO: 2

APPROXIMATE TIME: 50 minutes

2. **EVENT PARAMETERS:** Students must bring blunt tipped scissors and a ruler.

3. **THE COMPETITION:**

- a. Each team will be given a bag of building materials. All bags will contain the same materials.
- b. Examples of materials that may be provided include, but are not limited to: paper cups, drinking straws, paper clips, string, tape, paper, thumbtacks, craft sticks, plastic zip-top lunch bags, etc. Students are not required to use all of the materials provided. This is only a sample list – the actual materials supplied may be different.
- c. Only those materials contained in the bag may be used to build the structure. The bag may not be used. No other materials or adhesives may be part of the finished device.
- d. If the device is required to support a load, the load will be available to the students so they can incorporate it into their building plans. When finished building, students must remove the load from their device. When directed by the event supervisor, the students will place the official load in/on the device.
- e. The team of students will have a maximum of 40 minutes to construct the specified device.
- f. Unless specifically stated in the instructions, devices must be freestanding and may not be attached to a tabletop, floor, ceiling, or other support.
- g. If possible, this event should occur in a large room or in multiple rooms at the same time. Since students will not know the type of device to be built ahead of time, no one other than the judges and contestants will be allowed in the building / judging area.

4. **SCORING:**

- a. Highest or lowest score wins depending on building instructions.
- b. The Primary and Secondary dimensions specified in the building instructions will be measured as accurately as possible by the judges prior to placing the load (if required) on the device. The devices will be judged according to the Primary dimension (e.g., height for a tower, length for a bridge or boat). The device with the greatest Primary dimension, that supports the load for a specified time, will be the winner.
- c. Devices that do not support the load for the specified time will be ranked, by their Primary Dimension, after all those that do. Devices that do not support the load may not be ranked ahead of devices that do.
- d. In the event of a tie, the device with the smallest Secondary Dimension (e.g., width of base of tower or width of bridge) will be the winner.