Duct Tape Challenge – 2018 Rules

1. **<u>DESCRIPTION</u>**: This event will test a team's ability to design and build a structure primarily from Duck® Tape that completes a task, which won't be revealed until the competition begins.



- 2. TEAM OF UP TO: 2 IMPOUND: No MAXIMUM TIME: 50 min
- 3. **TEAMS:** Teams may bring something to write with, a ruler, scissors, and a stopwatch.
- 4. **EVENT LEADERS:** Must provide challenge instructions and all materials needed for the event.
- 5. **SAFETY REQUIREMENTS:** None.

6. THE COMPETITION:

- a. **LOCATION:** This event should occur in a large room or in multiple rooms at the same time. As much as possible, teams should be given the same type of area to build (e.g. space on the floor, flat desktop).
- b. **MATERIALS:** Each team will be given the exact same type and quantity of materials, including a Shurtape-brand duct tape. Examples of supplemental materials may be: styrofoam bowls, drinking straws, paper clips, cups, string, paper, and popsicle sticks. Materials are not limited to this list. The actual materials provided may be entirely different. Only those materials given to the competitors may be used to build the structure.
- c. **TASK:** The event leader will provide task instructions that identify the task to complete. The instructions will not be released until the beginning of the competition. Example tasks may be: parachute that descends the slowest, longest bridge span to support a tennis ball without sagging, lightest boat that holds the most, tallest sail that stands up to a fan, longest/highest/slowest ramp to deliver a ball to a destination, plane that flies the furthest/longest, etc.. Tasks are not limited to this list.
- d. **LOAD:** If the device must support a load, a separate load of the same size and weight as used for testing will be provided to each team so they can incorporate it into their building plans or test it while building. Judges may use one "official" load for testing all devices.
- e. **TIME:** The team of students will have a maximum of 35 minutes to complete the specified task. The remainder of the time will be used for judging. Teams may leave once their device has been judged
- f. **ATTACHMENT:** Unless specifically stated in the task instructions, devices must be freestanding and may not be attached to a tabletop, floor, ceiling or other support.

7. **SCORING:**

- a. Devices will be judged according to the guidelines set forth by the event leader. The dimensions specified in the task instructions will be measured and recorded as accurately as possible by the event leader
- b. At the event leader's discretion, devices that are required to accomplish a task (e.g. support a load for so many seconds) may either be given an assigned number of points for completing the task, or be tiered so that all devices completing the task rank above those that do not. This must be specified in the task instruction sheet.

11. EVENT RESOURCES:

See the Event Resource page on www.sciencenc.com for additional information.

