Eiffel Tower Contest
Sponsored by the Society of Plastics Engineers and the
School of Chemical, Biological and Materials
Engineering at the University of Oklahoma

Foreword
This number of entries per school is unlimited. Each entry is a team project, conducted by two students.

Each school MUST complete the online group registration by February 12, 2020. Prizes will be awarded to winning entries from registered schools (entries from unregistered schools will NOT be eligible for prizes).

Design Statement & Objective
Using plastic drinking straws, build a tower at the OEF Engineering Fair within five minutes. Tallest three towers, which support a ceramic dinner plate (minimum diameter 11 inches) and are still standing up to the time measurement is confirmed by the judges, will be the winning entries.

Materials
Only listed materials are permitted and MUST BE PROVIDED BY THE CONTESTANTS (i.e. STUDENTS)
1. An unlimited number of plastic drinking straws as follows —
   a. Firm or flex type plastic drinking straws.
   b. Maximum inside diameter of ¼" (See Judging & Scoring (2) for clarification)
   c. Maximum length of 10"
   d. Maximum wall thickness of 0.01"
2. Floral wire, bread wrapper or garbage bag wire ties of not more than 4" in length.
3. A ceramic dinner plate of at least 11 inches in diameter

Rules & Remarks
1. Each team will have a 10 ft. X 10 ft. working area, also marked off with masking tape. Students must limit their building activity and the base of their tower to this area. Sections of the tower which do not touch the floor may extend beyond the marked base. As many free standing structures as you want are allowed.
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2. A two-student team will assemble plastic straws to construct the tower after the judges signal starting time. The approved drinking straws may be connected using only wire ties, or, the straws may be inserted into one another without using the ties. No pre-assembly is permitted prior to the starting signal by the judges; however straws can be cut or holes punched beforehand to assist in assembly. Students must place the plate prior to the end of the five-minute construction time limit. Height of tower will be measured from the lowest part of the plate to the floor.

3. Any number of straws may be assembled end to end, however, no more than ten straws may be “bundled” together or stacked inside one another. It is allowed to have two groups of ten straws assembled end to end, but if assembled laterally together there must be at least two straw widths separating the two groups.

4. Towers which collapse during the five-minute construction time may be rebuilt. Towers which collapse after the five-minute construction time but prior to judging will be disqualified.

5. Teams may bring boxes of whole or precut straws to the construction site. Ladders, scissors, knives or other instruments WILL NOT BE PERMITTED in the area. Pre-cut materials ARE permitted, but pre-assembled materials ARE NOT permitted.

6. Following judging, all materials must be removed from the area by the team and disposed of in designated receptacles. Teams will be disqualified if they leave without removing ALL their materials.

Judging & Scoring

1. Students will receive an Eiffel Tower Entry Form (ET-EF) at the competition site. Students must submit this form at the contest registration before Noon.

2. Judges will check internal dimensions of the plastic drinking straws by inserting a standard 0.250” steel dowel pin (available at most hardware stores). If the pin falls through any of the straws the students will be disqualified from the competition.

3. The two-student team will be permitted at least one minute to organize their materials prior to the five-minute timed competition. Several teams will compete at the same time, each in their own designated work area. When judges give the signal to start, teams will begin construction. When judges call "time" (5-minute time limit), construction must stop. Judges will measure the height of each tower from the base of the tower to the part of the plate that is closest to the floor and record the results.

4. Entries must be registered between 9:00 a.m. and 12:00 p.m. on Fair day. Competition will run continuously from 9:30 a.m. until finished. Judges will determine winners at about 1:30 p.m. (winners need not be present).

5. Decision of judges, during all phases of the competition, is FINAL. In the event of a tie, prizes will be equally distributed between winning entries.

Prizes & Distribution

 Contest winners will be announced on the Engineer Fair web page at www.ospe.org. Those entries winning prizes will be notified through their teacher of record by mail by March 15.

First, Second and Third place winners will receive medals. The winning classrooms of the First, Second and Third Place entries will receive a cash award.