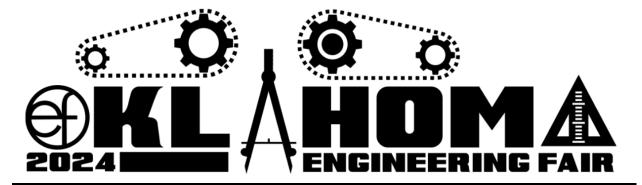






2024 EIFFEL TOWER RULES

Sponsored by Sponsored by the <u>Society of Plastics Engineers</u> and the <u>School of Chemical, Biological and Materials Engineering at the University of Oklahoma</u>



Foreword

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

Each school **MUST** complete a Fair Registration by February 16, 2024, five (5) business days **prior to the Engineering Fair.** Entry forms must be completed and handed in at time of competition check-in on the day of the Engineering Fair. 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 **children's book** and are still standing up to the time measurement is confirmed by the judges, will be the winning entries. You may NOT use any other structure (e.g. walls or ceiling) to help hold up your tower or book. You may not use a ladder (or any other object that you can step on like a stool) to help you build..

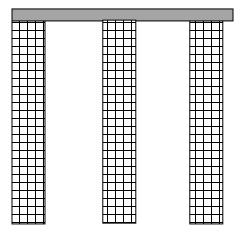
Materials

Only listed materials are permitted and MUST BE PROVIDED BY THE CONTESTANTS (i.e. STUDENTS)

- **1.** An unlimited number of plastic drinking straws. Any diameter drinking straw is allowed (yes, even those from smoothies). Maximum length is 12 inches. You may use different types of straws as well.
- **2.** Floral wire, bread wrapper or garbage bag wire ties, each not more than 4" in length. However, you can connect any number of 4" ties together (but the ties have to be separated prior to starting to build).
- **3.** A hardback children's book. Each dimension other than the thickness must be larger than 6 inches. Regarding the thickness, any number of pages are allowed (however, you can't cut out pages to make the book lighter!).

Rules & Remarks

1. You have a 10 ft. X 10 ft. working area. 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.



Allowed!

2024 Eiffel Tower Contest - Continued

- 2. A two-student team will assemble plastic straws to construct the tower after the judge signals 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 book on the tower prior to the end of the five-minute construction time limit. Height of tower will be measured from the lowest part of the book to the floor.
- **3.** Any number of straws may be assembled end to end, however, no more than twenty straws may be "bundled" together or stacked inside one another.
- **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. Pre-cut materials **ARE** permitted, but pre-assembled materials **ARE NOT** permitted.

Judging & Scoring

1. 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 book that is closest to the floor and record the results.

Prizes & Distribution

Contest winners will be announced on the Engineer Fair web page at www.oef.org/2024winners. Those entries winning prizes will be notified through their teacher of record by mail by March 1, 2024

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