

NAKED EGG DROP

Type of Competition: Team

Composition of Team: Team (1 or 2 persons per team)

Overview: To design and build a structure to safely catch a raw chicken egg dropped

from varying heights.

Materials: LEGAL: Large, fresh, raw, white chicken egg will be provided by judge

to student team to be pre-inspected by both parties prior to drop.

ILLEGAL: "Treated" or hard-boiled eggs. Rotten eggs, sighting device

The container may not include anything flammable, any substance that will splatter, fruits or vegetables (popcorn is okay), powdered soap, or glass.

Rules:

- 1. One **large**, supervisor-inspected, white, raw egg will be provided by the judges to each team. A plumb line will also be provided by the host center. Use of the plumb line is not mandatory, but it is the only sighting device allowed in the competition.
- 2. No material may be added to the egg. Any crack, fracture, or chip will be considered a break. If the egg breaks, the student/team is disqualified.
- 3. **Contestants receive one egg and** a maximum of three drops will be allowed at the discretion of the dropper. No more than **2 minutes** between drops will be allowed. Dropper (or team member) may restore structure to pre-drop condition. Maximum drop height to be determined by MESA Day host.
- 4. A team member may drop the egg from any height he/she chooses, but the first drop must be at least 100 cm above the highest point of the landing surface.
- Teams will be taken on the first-come basis (from registration sheet). Each team will
 complete all of their drops in one round. The final drop position will be recorded by
 the judges. Disqualified entries may be dropped at the discretion of the host center,
 time permitting.
- 6. Tampering with any package in any way by any person will cause for immediate disqualification of that person's team and zero points awarded.
- 7. The landing structure is defined as any structure designed to catch or collect the egg. Structure height will be measured from the lowest point to the highest point on the structure. The structure may not be modified, repaired, or changed in any way after it has been measured by the judges and must be completely assembled before arrival at contest site.



- 8. The structure must pass freely through a 14" rigid hoop when the hoop is turned at all angels including diagonally. Packages must be constructed so that spillage of materials will occur under any circumstance (i.e., transporting). Packages using materials that rise naturally must be re-measured prior to each drop.
- 9. Drop height will be measured from the <u>highest point of the landing structure</u> to the bottom of the egg prior to release.
- 10. The landing structure will be positioned by the non-dropping partner or in the case of a single person, the judge will position the container as directed by the dropping contestant.
- 11. If a dropped egg does not strike the interior of the target, even if it does not break, the student/team is disqualified.

Awards:

First place will be awarded to the team whose ratio (drop height divided by the structure height) is the highest. Ties will be decided by:

- 1. Lowest package height
- 2. Fewest drops
- 3. Smallest surface area. (container opening)