

SHHH 22 - RULES FOR THE EGG DROP CONTEST

Object:

To design a much needed egg transport vehicle (ETV) to convey uncooked eggs through a vertical height of approximately 8 m, closest to the target area.

Apparatus:

Each ETV must meet the following specifications:

- a. size: the ETV, when in the configuration it will have when released, must be able to fit inside a volume that is in the shape of a rectangular box with dimensions: 25 cm x 25 cm x 50 cm
- b. materials: The vehicle must be constructed entirely of one or more of the following materials: wood, metal, cloth, rubber, paper, string, feathers, glue, ABS, PLA, or cardboard. Other plastics, styrofoam, or other synthetic packing materials are forbidden. Inflated balloons of any type are also forbidden. If different paper types are used (e.g. poster board, binder paper, construction paper, etc), each paper type will count as a different material.

Competition:

1. Each entry will be qualified by seeing that the requirements for size and materials mentioned above are met. Any violation will disqualify the entry. The mass of each entry will also be recorded.
2. Eggs will be supplied to contestants at the time of the contest (medium size).
3. Contestants must be able to secure their eggs in the containers within 5 minutes.
4. The ETV, with egg, will be dropped by a team member from the Vancouver Hackspace Window (being held level with the ledge at the time of release) to the asphalt alleyway. A 822.96 cm drop.
5. The target (a 5cm red circle) will be visible from the window.

Scoring:

1. Immediately after a drop, both egg and ETV will be submitted to the contest judge. Each egg will be judged undamaged or damaged (contains visible cracks or worse). Distance from the target to the closest edge of the ETV. If the egg is damaged, the score for the ETV will be zero.
2. For those ETVs with undamaged eggs, a score will be assigned as follows:

$$SCORE = x1 + x2 + x3$$

Where: $x1 = 10 \times$ (mass of ETV in grams), $x2 = 100 \times$ (number of different materials used in the design), $x3 = 10 \times$ (distance from target in cm)

The best design will be judged to be the one with the lowest score.

* These are slightly modified version of rules [Hartnell College Egg drop rules](#)