

Description:

Each member will construct a container (crate) that will prevent an egg from breaking as it is dropped from a spot selected by the teacher onto a target.

Crate and Materials:

1) Crates must be less than 20 centimeters* on any side (length, width, and height) and have a mass less than 500 grams* (without the egg).

* Metric Conversions: 20 cm = approx $7\frac{7}{8}$ in 500 g = approx 1 lb

- 2) Metal, wood, and glass materials (including fiberglass) are not allowed for safety reasons. Students may use other materials, such as rubber bands, tape, plastic, cardboard, etc. Parachutes and propellers are not allowed.
- 3) The outside of the package may not contain any material to aid the package in adhering to the target (such as tape, glue, etc.)

Competition:

Crates and materials will be impounded on competition day after they have been inspected. NO modifications or additions will be allowed after that time. You cannot add tape, rubber bands, etc. at the time of the drop. All parts of the crate must begin above the designated drop line. You may bring your own plumb lines to assist you in lining up their container with the target. DO NOT BRING EGGS - I will provide raw Grade A large eggs on drop day.

Scoring:

Each crate will be dropped from a height (no more than 20 meters) and location determined by the teacher. The object of the contest is to land <u>and remain</u> on the center of the target without the egg breaking. If the egg <u>does not</u> leave a wet mark on a paper towel after the drop, it is considered unbroken!

The score will be determined by measuring the distance between the furthest edge (or part) of the package and the center of the target. If the package breaks apart at any time during the drop, the distance between the center of the target and the furthest part will be recorded. The lightest package (without the egg) will win in case of a tie.