

# STREAM Day Egg Drop Competition

Teams are required to purchase their own materials and build their Egg drop container prior to arrival at the competition.

# Objective

The objective of this competition is to design and construct a container which will prevent one raw egg from breaking when the container is dropped. The competition will be judged on the number of times the container can be dropped without breaking the egg. The eggs may be dropped at several different heights.

# Judging Criteria

- Height of the last drop; or height from which the eggs did not break.
- Originality, feasibility and reusability (in the case of a tie in highest drop).

### **Design Principals**

The following principals constrain the design and materials used so that the competition is safe and does not damage NDA property. The judges will not allow a container to be dropped if they deem that it does not follow these principles:

Containers must:

- Not be dangerous to spectators while falling or after impact
- Not damage the landing surface
- Not make a mess that cannot be quickly picked up after impact

### Rules

The following rules are based on the principals listed above. However, the following rules do not exhaust every possibility and the judges have final discretion of what is not allowed within the design principals.

• Containers must be ready for loading at the site of competition. Only the eggs supplied by competition officials on site may be used.



- The container may not be "fixed" between drops, except to replace the eggs after inspection.
- Containers must be designed so that they may be dropped from any position. They must also be immediately reusable.
- Container must entirely fit within a 6 in × 6 in × 6 in cube before and within one (1) minute of drop.
- Container must weigh less than 5 lbs.
- The judges must be able to access the eggs for inspection within one (1) minute of landing.
- No parachutes allowed. This will be strictly enforced.
- Must nor break into many small pieces upon impact.
- Must not contain:
  - $\circ$  Liquid or gel
  - o Food Products
  - A large quantity of metal (such as a steel frame)
  - Styrofoam in any form.

# **Material Allowances:**

- Wood
- Glue
- Paper products
- Straw
- Rubber
- Rubber bands
- Cardboard
- String
- Plastics
- Bubble wrap
- Tape
- Yarn
- Cups
- Bowls

We are hoping to hold the egg drop outside. In the case if inclement weather, Egg drop will relocate indoors.