

# Do Not Break The Egg!

**Objective:** To build a structure that will protect a raw egg dropped from more than 5.00 m.

**Materials:**

A1	Hon
Large Raw Egg Hot Glue Straws, Coffee Stirrers Toothpicks	Large Raw Egg Hot Glue Toothpicks

**Teams:** You may work alone or with one other person from the same block. Partners must be approved by your teacher

- Rules:**
1. Any materials used that are not supplied by the teacher must be approved before use
  2. The egg must be easily recovered after each trial
  3. Eggs may not be glued to your structure
  4. Eggs will be supplied the day of the trials by your teacher
  5. Eggs may not be altered in any way
  6. Your structure must fit in a 0.50 m cube
  7. Each structure must have a place to attach a string loop on the top
  8. Multiple structures may be made for final testing but each must be identical

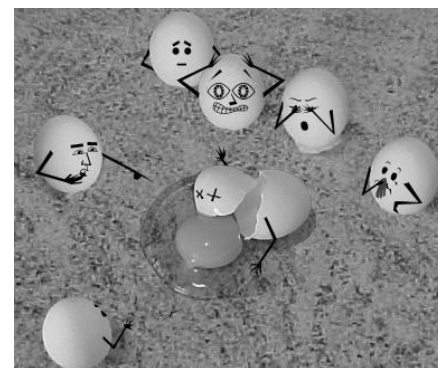
**Designs:** Students will sketch their design using the supplied design sheets or Google SketchUp

**Trials:** Each structure will be given a maximum of three drops. All drops will be performed during the same block.

**Grading:**

Design	50 points
Testing	100 points
Outcome	50 points*
Reflection on Outcome	100 points

\*these points will be determined by these rules  
 25 points if egg is not broken  
 25 points for mass of structure minus a point for every 2 grams over 50.0g



$$Score = 25(\text{egg} \text{ _ broken}) + 25 \left[ \frac{100}{50 + mass} \right]$$

**Due Dates:** See Individual Class Syllabus