



Crash Test Dummies LLC Inc.

**The Explorer's will be hosting an EGG DROP Contest**

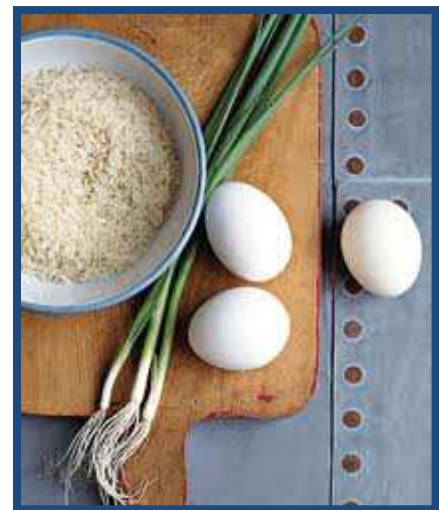
**Wednesday March 9, 2011**

**7:00 PM – 9:00 PM**

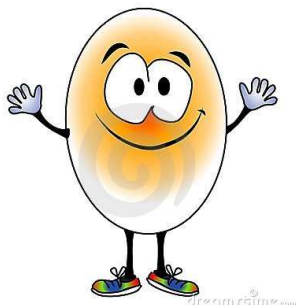
**At EPRI (Energy Power Research Institute)  
off WT Harris Blvd, Charlotte, NC**

➤ **Welcome to Crash Test Dummies LLC Inc.:**

You are a new engineering intern hired on to the company *Crash Test Dummies*. Your first task is a new field research endeavor. You will create a contraption that will protect the egg used in J-Lo's breakfast. We have specific instructions... The eggs are to be delivered one at a time and must have a scrambled yoke. However, the egg shell must be intact. Your new coworker in the office next to yours said the only way to get this done is to build a contraption that will be dropped from 15 feet but keeps the egg shell intact. Your primary objective is to create a design that will protect a large grade-A egg (of the best quality of course) from breaking when dropped. All interns will compete to design the device with the lightest weight, fewest number of parts, and the most accurate drop relative to the Drop Zone target, all while protecting the valuable merchandise.



**Remember, it is imperative that the shell does not break!!!**



➤ **Lowest Score Wins:**

**Score = (W + NP + DZ)\*EggLife  
Egg Breaks and you're Out!**

**“Good Luck!!!!”**

➤ **Where: (W+NP+DZ)\*EggLife is defined as...**

W = Weight of the device in grams, (456 grams = 1 pound)

✚ Every 100 grams = 1 point

- Note: Please come with weight of entry (minus egg) written on outside of your contraption. Plan for all entries to be weighted but this gives judges options if time is of a concern.
- If use points, go to nearest 1/10 of a pound.

NP = number of parts,

✚ 1-3 parts = 1 point

✚ 4-7 parts = 3 points

✚ 8-10 parts = 4 points

✚ 11-15 parts = 7 points

✚ 16-20 parts = 10 points

✚ 21+ parts = 20 points

DZ = Drop Zone Accuracy

✚ Bulls Eye = 1 point

✚ 2nd Zone = 2 points

✚ 3rd Zone = 3 points

✚ Of the Target = 10 points



EggLife = Did the Egg Make the fall?

✚ No crack or damage = 1 (Happy)

✚ 1 Crack = 2x (Annoyed)

✚ 2 Cracks = 3x (Disappointed)

✚ Scrambled = Disqualified (Crying - never got a breakfast)

*Extra Credit = Judges Discretionary Points, all three judges must agree, only 2 entrees awarded credit per item, egg must have no cracks.*

✚ Device would able to drop more than once = -1 points

✚ Simplistic and frugal design = -2 points

✚ Creative design; device has a theme = -4 points

✚ Unique Design, wows judges, makes them say ummm = -6 points

➤ General Rules:

1. Anyone with an **imagination** is eligible to enter this contest.
2. Entrants may be an **individual or team**; you can work with a friend but no more than three to a team.
3. There are **two (2) classes of entries**.

- a. Class 1 allows the use of packaging materials such as an egg crate, foam, Styrofoam (ec cetera).
- b. Class 2 does not allow packaging materials. The judges will determine as to which class the device belongs.

4. For each class, the lowest 2 scores will determine the contest winners. If there is a tie for a prize it will be combined with the next lower prize and divided equally among those tied.



5. **Eggs will be provided** the day of the contest. They will be large grade-A eggs.

6. Eggs will be sealed in a **zip lock bag**, also **provided**.

7. The entire device must be above the drop plane (even with the top of the railing) when released. It cannot be in contact with the ground, a person, or a structure. For example, a long slide may not be used to transport the egg from the balcony to the ground.

8. Each device will be **weighed** at the contest. The weight will be measured in grams with no egg inside. The lowest weight for a device will be zero (no negative values will be allowed).

9. The **number of parts** used for each device will be counted on the day of the contest. Each individual piece will count as one part. For example, if the egg is cradled in 100 Styrofoam peanuts glued together will have 101 parts, 100 parts peanuts and 1 part glue. Multiple use of scotch tape, not duck tape, will be counted as one part. Each piece of heavy tape will be a part.

10. The egg must be able to be **removed and replaced quickly**. A key task.

11. The **Drop Zone** will be comprised of three squares: two, four and six feet square. The device will receive points based on the outermost square in which any part of the device lies.

12. Any entry or team may enter up to 3 devices as long as each design is unique.

13. The judges have final determination in all matters; it's a judge's world out there.

14. If the **egg cracks and egg brains ooze out, it's a zero** multiple and no breakfast served.