

2nd Annual MHS Egg Drop Challenge

Using only plastic straws, tape and 1 sheet of 8.5" x 11" of paper, your group will have to will have design a container that allows an uncooked egg to withstand a 2.5 meter fall without breaking. Your efforts will be measured on a 100 point scale as shown below.

Egg Condition	Points
Egg totally unharmed	100
Egg is cracked, but not leaking	90
Anything else	0

Groups that score less than 90 points will be required to analyze and write an extensive report on their device's areas of failures and possible redesign options

All groups will be required to discuss the physics involved in their design

Challenge Rules

Your group can use these items and ONLY these items in your mechanism:

- 20 straws
- 1 sheet of 8.5" x 11" copy paper
- 1.5 meters of masking tape
- 1 egg

Drop Height

2.5 meters (approximately the distance from room ceiling to floor)

Construction constraints

- You will have two days to design and build your egg drop mechanism.
- The egg must be easily placed inside of the mechanism before the competition and relatively easy to remove or inspected after being dropped
- Mechanisms that intentionally slow the device down during the fall are not acceptable designs
- Considerations for the orientation of how the device is dropped may or may not be honored
- Your group's name must be somewhere visible on your device

Device Testing

We will hold a public, school-wide egg drop after school. At least one representative from your group must be present for your egg to be dropped.

Device Durability

If a device is able to withstand 3 consecutive drops without damage to the egg, the device is eligible for a design award