



At Home STEM Challenge: The “Hawk Egg” Drop

Sponsored by Moulton PTA
Science Week 2023 | November 9th, 2023

BUILD YOUR OWN EGG LANDER TO BE DROPPED NEXT THURSDAY, NOVEMBER 9TH!

Learn about how EGG-citing kinetic energy, motion, gravity, and the real consequences of design engineering can be! Watch to see whether each falling egg will survive the impact intact or go splat! Get creative with your design and have fun!

The Challenge: To build an egg container/lander that will protect a raw, uncooked egg as it is dropped from a high ladder! Get creative with your design and have fun!

How the Egg Drop challenge works:

1. The PTA will provide all eggs. Do not bring an egg (of any type) to school.
2. **All landers must be made at home prior to the event.**
3. Bring your unsealed, eggless landing device to the **MPR on Thursday, 11/9/23 at 7:30am.** Landers will be prepped for launch with a raw egg, provided by the PTA.
4. Please fill out the back of this form, and turn it in with your lander on Thursday, 11/9/23.
5. You will receive an “EGG-cellent” sticker at drop-off time for your efforts, wear it proudly all day!
6. The PTA will begin dropping landers during the student’s lunch time, where their classmates may choose to observe. Once dropped The PTA judges will inspect and announce the winners of the Egg Drop Challenge following the final drop. Winners will also be recognized at flag ceremony the following week.

Egg Drop Challenge Rules:

- Your lander must be in free fall during the drop.
- Your lander must hold a large AA egg.
- Weight and Size and Design Restrictions: 2 lbs., 10 inches maximum package in circumference.
- No metals, glass, or chemical containers.
- No gases other than air may be used (no helium balloons).
- No splatterables are permitted such as peanut butter, Jell-O, liquids, fruit or vegetables.
- No flammable substances.
- Your lander must have an easily accessible location for the judge to place the egg.
- You may submit egg loading instructions on a small card attached to the lander if needed.
- Landers should be made by the student with minimal assistance.
- All landers (and all parts making up a lander) will be discarded after the drop! Assume you will permanently part with your lander at drop-off, so take lots of pictures at home.
- Failure to follow design guidelines or the list of approved materials will result in disqualification.
- It is up to the judges’ discretion as to whether the guidelines were followed.

Judging

A damaged egg is defined as one with a visible crack or worse. Hairline cracks are not considered damaged eggs.

Surviving Landers

If everything works perfectly (no rain, splatter, broken pieces, etc.) we hope to show off the working landers (that are built following the rules) on the outdoor stage during recess (keep in mind that all landers will be discarded after display.)

For any questions about The “Hawk Egg” Drop Challenge please contact:
Kristin Rubio, PTA Science Chair at science@moultonpta.org