*Egg drop project* [](http://www.google.com/imgres?imgurl=http://media.philly.com/images/20090507_inq_egg_bandage.jpg&imgrefurl=http://www.philly.com/philly/business/personal_finance/20090507_Putting_the_nest_egg_together_again.html&h=289&w=406&tbnid=399aodWnds0nFM:&zoom=1&q=falling%20egg&docid=h5Z1bMqaUrJr0M&ei=EWiHVJpmk-aDBOjugcAJ&tbm=isch&ved=0CDAQMygSMBI&iact=rc&uact=3&dur=787&page=1&start=0&ndsp=20)

Welcome to the egg drop competition. Your group of no more than three will attempt to protect an egg from the force of gravitational energy of falling from 10 feet. Each group will design and implement a plan to resist the forces applied to an egg falling from 10 feet. Your grade will based on your ability to successfully protect your egg AND explain your rationale.

RULES

1. Your group must use a standard egg that has not been changed or cooked.
2. The egg must be accessible after we drop it (we must be able to take the egg out after it is dropped)

EGG DAY

[](http://www.google.com/imgres?imgurl=http://navigatingtheheart.com/wp-content/uploads/2014/07/1416754038_1393021024.jpg&imgrefurl=http://navigatingtheheart.com/he-can-put-it-back-together-again/&h=2400&w=2400&tbnid=w8dZqgN_3YtFmM:&zoom=1&q=falling%20egg&docid=mC31Tiif44mndM&ei=UWiHVILiAsSZgwTawYP4Cw&tbm=isch&ved=0CBkQMygRMBE4yAE&iact=rc&uact=3&dur=4238&page=8&start=200&ndsp=28)On the day that your egg will plummet to the ground your group MUST:

-***Hand in the form attached to this one***

***-Present your rationale AND materials***

***-Drop your egg***

*You will have time in class to bring materials AND create your project. Choose your group carefully, as it may be necessary for you to get together OUTSIDE of school.*

*The groups that remain will compete against the other classes to crown a champion of egg day.*

*“May the eggs be ever in your favor”*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CATEGORY |  |  |  |  |
| Materials (5) | Materials were clearly listed and descriptive (5) |  |  | no materials are listed (0) |
| Hypothesis (15) | A clear and concise description is included with descriptions regarding the forces and energy transfer as well as the rationale for the protection of the egg. (15) | A clear and concise hypothesis is present but does not include a description of the forces and or the energy transfer of the impact (12) | A hypothesis is written with no clear thought describing any physical forces or energy with illegible or minimal thought present. (8) | No hypothesis is presented. (0) |
| Presentation (15) | Students present all materials and explination of expectations clearly and concisely with evidence of obtained knowledge of the transfer of energy and forces applied. (15) | Students present the materials used and expectations with little evideince of energy transfer or forces applied. (10) | 1 of the expected items is missing OR student displays NO evidence of scientific understanding of the physical rationale for expected outcomes. (6) | No presentation is made. (0) |
| Result (8) | The egg is protected AND accessible to view its integrity remains intact. (8) | The egg remains intact, however it is not accessible to view nor investigate. (6) | The egg is destroyed or cracked and was not able to withstand the fall. (4) | No egg was dropped. (0) |

Egg Drop Project Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This form will be handed in on EGG DAY. Please complete 1 of these per group.

1. List the materials used in your project \_\_\_\_\_\_/5

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\*if your group uses ONLY 1 item to protect your egg, I will give you 1 point extra credit

1. Hypothesize and explain why your materials will protect your egg \_\_\_\_\_\_/15

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1. Presentation \_\_\_\_\_\_/15
2. Result \_\_\_\_\_\_/8
3. Total \_\_\_\_\_\_/43