# Egg Drop Project

How can you protect an egg from a significant fall?

Considerations: What kind of safety features do you think of when you think about slowing or stopping forces? What practical applications use safety features to protect objects?

Procedure: Build a contraption to protect an egg as it falls from the ladder.

Rules for Building:

1. No liquids or hazardous materials.
2. No “bursting” apparatus – points may be deducted if the contraption breaks on contact.
3. No pre-made packaging materials (i.e. bubble wrap, packing peanuts, etc.)
4. You must provide an egg. Bring the egg to Mrs. Fergusson’s classroom at the beginning of the school day.
5. Size must be less than 30cm x 30 cm x 30 cm and under 100g pre-egg.
6. Contraptions not meeting guidelines 1-3 will not be permitted to drop.
7. Raid your recycling box to get materials. Don’t go out and spend much money, recycle! ☺

Egg Drop Rubric

There will be three drops of your egg for a total possible of 60 points on this project. Each drop will be evaluated based on the following criteria. You will be evaluated based on your original egg contraption pre-drop. Then you will be evaluated on each of the three egg drops.

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| --- | --- | --- | --- | --- | --- |
| **Category** | **Excellent – 30 pts** | **Good – 25 points** | **Fair – 20 points** | **Poor – 10 points** | **Total Scores** |
| **Weight** | <50g | 50-100g | 100-200g | 200+g |  |
| **Size** | 15cm x 15cm x 15 cm or less | 15 to 30 cm3 | 30 to 60 cm3 | 60cm3 + |  |
| **Guidelines** |  | Meets all materials requirements | Breaks 1 requirement | Breaks 2 Requirements |  |
| Egg Drops | Height 1 – 70 cm | Height 2 – 115 cm | Height 3 – 180 cm |  |  |
|  | 10 pts – Survives with no cracks  5 pts – Survives with minor cracks  0 pts- egg breaks | 10 pts – Survives with no cracks  5 pts – Survives with minor cracks  0 pts- egg breaks | 10 pts – Survives with no cracks  5 pts – Survives with minor cracks  0 pts- egg breaks |  |  |

# This Project is due: Friday December 21st