Egg drop

Grade 3

Testable Question

What is the best way to drop an egg to prevent it from cracking.

Prediction:

I think that the wrapped parachute will help the most.

Procedure: 5pts - Describe the step-by-step process you have planned in a way that someone else could repeat the same process. Be detailed and as clear as possible. Use as many or as few steps as you need.

1. Drop a control test (nothing around the egg)
2. Drop an egg with a parachute attached to it
3. Drop an egg wrapped in socks
4. Drop an egg wrapped in paper towels
5. (Take pictures/videos of end result)
6. Observe the data (pics/vid)

Background: 5 pts - Describe why this project was selected and share what you found out in your research. Explain why this project is important.

I chose this project because it sounded like fun!

In my research I found out that sometimes things don't go as planned. Sometimes things are useful that you wouldn't expect.

This project is important because the information could be helpful if they deliver eggs with drones in the future. We could find out what the easiest way is to drop eggs to a house.

Constant Conditions: 10 pts - Identify your independent variable, dependent variable, and constant conditions. Be sure to measure in metric measurements.

Independent Variable: The ONE thing you change
The thing the egg is attached to when dropped

Dependent Variable: What you are measuring or observing
How the egg reacts/cracks when it hits the ground

Constant Conditions: What you are keeping the same every time
1. Height dropped on
2. Object dropped onto
3. Force applied
4. Same type eggs

Data and Trials: 10 pts & 5 pts - Use photos, charts, graphs, or illustrations to show your data. Be sure to label your data and add information clearly. At least 3 trials or observations should be shown. No faces should be shown in photographs. Use additional pages if needed.

Note: (Create a scale 1-10 on how badly egg is cracked)
https://docs.google.com/spreadsheets/d/1UvuOzcTTBfREI_kCUqP-FdECekGAWEzlawCMOSSuNy4/edit?gid=0#gid=0

Screenshot ⇒

Type of Contraption	Trial 1	Trial 2	Trial 3
None	1	1	1
Wrapped parachute	5	3	5
unwrapped parachute	2	4	3
Wrapped in Socks	1	1	1
Wrapped in Papertowels	1	0	1
difrent parachute	5	4	2
Egg Cracked Scale = 0-5. 5 is not cracked, 0 is completely cracked			

Thirty eggs=

Some eggs after=
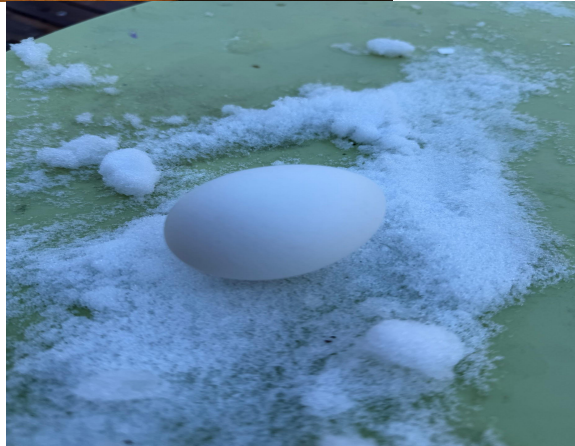
Conclusion and Reflection: 10 pts - Share what you learned. Were there any surprises? What would you do differently or to continue the project?

I found out that…my estimation was right! (the wrapped parachute)

I was surprised that…the other parachute did not do good

If I did this project again…I would wrap it up more