Egg drop device analysis report

All groups must address the following questions using what we've studied in class

- Explain which model we've previously studied best describes the motion of the falling egg
- How does the energy stored in the egg change as it falls? Where did this energy originate?
- Does mass affect the velocity at which the egg hits the ground? Explain how you know.
- How does the mass of the device affect the change of momentum of the egg? How does momentum affect the survivability of the egg?
- How would you design a device for an egg to survive a 5 meter drop? 25 meter drop? Assume you have a budget of $50 total to purchase materials for both devices.

If your egg did not survive, address these questions in addition to the above questions.

- ***What was the root cause of your egg's failure to survive the fall?***
- ***Describe in detail how your group might have changed the design***
- ***Complete this calculation:***
    - ***If a 50 g egg fell 2.5 meters, how fast was the egg traveling before it hit the ground?***
    - ***What was the egg's change in momentum after hitting the ground?***
    - ***If the egg was in contact with the floor for 0.1 seconds, what was the force on the egg?***