Parent Feedback form for the Egg Drop Project

Name: _____

Dear Parents please fill out the form on the back:
For each item, take some notes about what your student taught you about their design. In the right hand column, record any feedback or pointers you gave them. **The capsules must be brought to the classroom in the morning before school on each period's assigned day**. If all goes according to plan Periods 1 and 6 will drop their capsules on Thursday, Jan 24th and Periods 2 and 7 on Friday, Jan 25th.

For your reference here are the directions:

Eggs are very fragile and break easily… especially when dropped 10 meters onto a concrete parking lot! Your challenge is to design and produce an Egg Drop Capsule that will allow an unadulterated, raw egg to survive the impact 100% intact (ie: no cracking let alone spatting!)

The Rules:

- ✓ Regulation eggs only: large size, no thick-shelled organic eggs allowed. Eggs will be provided on Drop Day.
- ✓ Your egg capsule must not exceed a total volume of 3,000 cm^3
- ✓ No single dimension can exceed 50 cm (except parachutes)
- ✓ It must have a mass of less than 2 kg (think 2 liters of soda) without the egg.
- ✓ It cannot contain anything toxic or dangerous
- ✓ It cannot create excessive mess (no goo, no stains, no blowing bits of litter)
- ✓ You may use your own raw egg so that you can encapsulate it before the competition, but you must give me your egg right after your drop so that I can crack it and make sure it is unadulterated.

What you will turn in:

1. Make a to-scale sketch of your capsule with a brief paragraph that points out the features of your egg capsule and how and why you think it will work based on the principles that we have been discussing in class (Chapters 2-5). **Due the class before the drop.**
2. Build your egg drop capsule. It must be **at school the morning** of the competition, ready to weigh in and then drop. NO EXCEPTIONS!
3. A post-drop write-up that examines, in depth, why you think your capsule worked or didn't work and how you could improve it. If your capsule worked, improvements would be things that make it simpler, smaller, lighter, or less expensive. **Due the class after the drop.**

THE FORM IS ON THE BACKSIDE

Parent Name: _____

Parent Signature: _____ Date: _____

Parent questions for students and Notes:	**Parental thoughts and feedback given to student:**
Describe your model to me while showing me your final sketch.	
Explain the scale for your sketch	
What is the volume of your capsule? How did you determine the volume?	
Is there any component of the capsule that you think is dangerous or messy? Explain.	
What strategies did you use to protect the egg? Describe the physics involved. (Students should explain how 3 physics equations are related to their capsule. Hint: Impulse, F_{net}, KE, v=gt…)	
What do you anticipate will happen when you drop the capsule? What did you trouble shoot for already?	