**Egg Drop Activity**

TEAM MEMBERS: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TEAM NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Using the listed materials, sketch a drawing of your egg drop device in the space below:

Fill out the material order form with the Quantity (number of each item) and total cost for that item (Cost \* Quantity). Add the totals to ensure you do not exceed $100.

**YOU HAVE $100 TO SPEND. NO BONUS POINTS FOR SAVING $**

*Use the materials carefully, as they will not be replaced if you damage them*.

|  |  |  |  |
| --- | --- | --- | --- |
| **Material** | **Cost ($)**  | **Quantity** | **Cost x Quantity** |
| Toothpick  | 2 |   |   |   |   |   |   |
| String  | 2 |   |   |  |   |   |   |
| Paperclip  | 2 |   |   |   |   |   |   |
| Straw |  | 3 |  |  |  |  |  |  |
| Cotton ball |   | 5 |   |   |   |   |   |   |
| Pipe Cleaner | 5 |   |   |   |   |   |   |
| Rubber band | 5 |   |   |   |   |   |   |
| Paper  |   | 6 |   |   |   |   |   |   |
| Cotton | 10 |   |   |   |   |   |   |
| Newspaper  | 20 |   |   |   |   |   |   |
| Balloon | 20 |   |   |   |   |   |   |
| Plastic Sheet | 20 |   |   |   |   |   |   |
|  |  |  **Total Cost**  =  |

You are to present information about your investigation which MUST include:

* Details of your design
* Results of your investigation (Did the egg break? How severe was the breakage?)
* Answers to the discussion questions below
1. Describe how your device protected the egg from cracking. What material was most important in your design? What material that you used was least effective?
2. Knowing what you know now, how would you improve upon your design to make it work better on the next try? Draw a picture if it helps!
3. What material would you use in another design that you did not use today, and WHY?

It can be a material that was not offered.

EXTENSION QUESTION (optional):

What things in nature are similar to this egg drop experiment? What things humans use are similar to the egg drop experiment? How do these things work? For example, the helicopter seeds that some trees use to disperse their seeds with the wind. What else is there?

You have the choice to present your information through:

* Written report
* Oral presentation
* Musical presentation
* Video presentation
* Poster
* Other (Please see the teacher to discuss other options