**Egg Drop Lab Assessment**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Objective: To have an egg contained in an apparatus designed from 3 pieces of construction paper and tape survive a drop from the ceiling.*

Introduction:

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| --- | --- | --- | --- | --- |
| 1)Explains the concepts of Impulse & Momentum, Force and Time, and establishes a relationship between all terms2)Provides a relevant example of impulse-momentum theorem other than the egg drop.  | Omitted (0 points)...response provided little or no description of the concepts listed. Student did not adequately establish a relationship between all terms....no alternate example provided | Attempted (2 points)...explanation is clear enough that the concepts can be at least partially understood. Significant missing or unclear elements hamper understanding. | Near Mastery (3 points)...explanation is clear enough that the concepts can be mostly understood. At most, one significant missing or unclear element is omitted or unclear....important details could be missing | Mastery (4 points)...explanation provided a comprehensive and well-rounded description of the concepts listed. A relationship between all terms is clearly written and fully described....alternate example stated clear enough so that the reader has confidence the student understands the theorem |

Example:
Concepts and Relationship: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Example of Impulse-Momentum Theorem: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Experimental Design/Conclusions:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1)Lists and explains the purpose of 2 components of design using physics concepts2) Explains 2 malfunctions that caused problems (or could have in the event of unbroken egg). 3) Discusses 2 modifications of design for more trials. | Omitted (0 points)...no explanation of components provided...response did not describe any malfunctions of design … no modifications of design identified | Attempted (2 points)… only 1 component identified… 1 malfunction described… 1 modification described | Near Mastery (3 points)… response provides explanation of 2 design components...response identifies 2 malfunctions… response includes 2 modifications | Mastery (4 points)...response provided the purpose of 2 design components and clearly explains this purpose using scientific concepts...response clearly identifies and explains 2 malfunctions/potential malfunctions of each of the design components…response thoroughly outlines the 2 modifications and the purpose of each modification to ensure further success |

Example:

Design Feature #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Purpose of Feature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What modification(s) could you make to this feature to ensure future success: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_