

	Design of Device	Construction of Device	Durability of Device	Condition of Egg	Participation
Descriptors	The extent to which the device adheres to physics principles and matches the design sketch.	The extent to which care is taken in construction of the device using only the allowed materials.	The extent to which the device stays intact and undamaged during testing.	The extent to which the egg survives the impact.	The extent to which the student is engaged in the project and makes efficient use of allotted time.
Weight (%)	25	20	15	25	15
6	Very Effective Device is designed using impulse and momentum principles, and exactly matches the design sketch.	Very Effective Device is well constructed with great care. It is made of only provided materials; no additional materials were used.	Very Effective Device stays intact and undamaged throughout flight with minimal damage upon impact.	Very Effective Eggshell has no visible cracks.	Very Effective Student is engaged in the project and is very self-directed. Efficiently uses time well throughout the project.
5	Good Device is designed using impulse and momentum principles, but deviates slightly from the design sketch.	Good Device is constructed, but not with great care. It is made of only provided materials; no additional materials were used.	Good Device does not stay intact throughout flight, but has only minimal damage upon impact.	Good Eggshell has hairline crack(s).	Good Student is engaged in the project, but does not always use time well and may have procrastinated on one thing. Project is completed on time.
4	Adequate Device is designed with little consideration of impulse and momentum principles, although it exactly matches the design sketch.	Adequate Device is well constructed with great care; however, the student uses 1–2 additional materials that are not part of the project.	Adequate Device stays intact and undamaged throughout flight with some damage upon impact.	Adequate Eggshell has cracks that leak a small amount of egg white only.	Adequate Student is somewhat engaged in the project. Uses time inefficiently, but completes the project on time.
3	Limited Device is designed with little consideration of impulse and momentum principles, and deviates from the design sketch.	Limited Device is constructed, but not with great care. The student uses 1–2 additional materials that are not part of the project.	Limited Device does not stay intact throughout flight, but has some damage upon impact.	Limited Eggshell has cracks that leak large amounts of egg white or small amounts of yolk.	Limited Student is occasionally distracted and does not complete the project on time.

Rubric (continued)

2	Minimal Device is designed with no consideration of impulse and momentum principles and the device may or may not match the design sketch.	Minimal Device is poorly constructed and uses 3 or more additional materials that are not part of the project.	Minimal Device stays intact and undamaged throughout flight with major damage upon impact.	Minimal Eggshell is broken and separated from egg with yolk exposed.	Minimal Student is often distracted and does not complete the project on time.
1	Inadequate No device is designed.	Inadequate No device is constructed.	Inadequate Device does not stay intact throughout flight and has major damage upon impact.	Inadequate Eggshell is completely broken with contents of egg ejected upon impact.	Inadequate Student is not engaged and does not complete the project at all.