

CAR CRASH LAB – LIVE CRASH TEST RUBRIC

1. Car Crash Live Test (25 points)

I. Car Design: Ergonomics (5 points)

- (1 pt) Are there 4+ windows that allow the driver and passenger to both “see” out?
- (1 pt) Are there 2+ doors that allow for easy access to each egg?
- (1 pt) Can the eggs be removed without utilizing the “jaws of life”?
- (1 pt) Does the rest of the design meet all specifications? (*one piece, trunk, etc.*)
- (1 pt) Is the car unique, yet realistic looking?

II. Car Design: Crumple Zone (5 points)

- (1 pt) Does the crumple zone meet all specifications? (*maximum 10 cm*)
- (1 pt) Is it visibly useful for slowing down the stop/reducing the force?
- (1 pt) Was it obviously designed with crumple spots in the hood?
- (2 pts) No restricted materials were utilized (*no foam, sponge, marshmallows, latex, etc.*)

III. Car Design: Restraint System (5 points)

- (2.5 pts) Do your passenger and driver both remain in their seats throughout the crash?
- (2.5 pts) Does your restraint system allow for proper leg room, arm room, head room, vision, etc.? (+1 point for 6 cm leg room; + ½ each: arm room, head room, vision)

IV. Crash Test Results: Survival of the Occupants (10 points – 5 points per egg)

- (5 pts) “Walk Away” - *Occupant survives completely unharmed*
- (4 pts) “Minor Concussion” - *A slight crack, but not initially obvious*
- (3 pts) “Broken Bones” - *Small cracks or puncture wound, no major leaks*
- (2 pts) “Life Threatening Injuries” - *Large cracks with slight leak of internal fluid*
- (1 pt) “Comatose” - *Significant damage, majority of the egg is intact with large leaks*
- (0 pt) “DOA” - *dead on arrival... self-explanatory ☹*

TOTAL POINTS POSSIBLE: 25

Name(s): _____ Date: _____ Period: ____ Group # ____

CAR CRASH LAB – LIVE CRASH TEST SCORE SHEET

	Total	Possible
Car Design: Ergonomics (5 pts)		5
Car Design: Crumple Zone (5 pts)		5
Car Design: Restraint System (5 pts)		5
Crash Results: Driver Survival Score (5 pts)		5
Crash Results: Passenger Survival Score (5 pts)		5
Grand Total		25

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