

Team Number: C School & Team Name: _____

Student Names: _____

CHECK IN & LOG

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|---|---|
| 1. <u> T </u> <u> F </u> | 2.a. Team impounds one Scrambler (with falling mass detached) in its lowest potential energy state. |
| 2. <u> T </u> <u> F </u> | 2.c. Participants properly wear eye protection at all times. (If false, do <u>not</u> run and team receives participation points.) |
| 3. Complete
Incomplete
Not Impounded/Missing | 4.a. Is the Practice Log complete, incomplete or not impounded/missing? (Circle one)
<i>Complete means including ≥ 4 parameters (Target Distance, Vehicle Distance from Target, Time, and 1 additional) for 10 or more practice runs. Log has a front cover labeled with the Team Name & Number.</i> |
| 4. Complete
Incomplete
Not Impounded/Missing | 4.b. Is the Design Log complete, incomplete or not impounded/missing? (Circle one)
<i>Complete means including materials used to construct the Vehicle, a labeled diagram or picture that identifies and describes the parts. All numerical value is labeled with standard units appropriate to the dimension being measured. Log has a front cover labeled with the Team Name & Number.</i> |

1ST RUN 2ND RUN ← **VEHICLE RUNS (8 MINUTES FOR UP TO 2 RUNS)**

Construction Parameters:

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| T | F | T | F | 3.a. The Scrambler consist of an egg transport (Vehicle) and an energy propulsion system. |
| T | F | T | F | 3.b. The entire Scrambler including the egg and falling mass, in the ready-to-run configuration, completely fit within an imaginary rectangular box with a 75.0 cm x 75.0 cm base and a 50.0 cm height. |
| T | F | T | F | 3.c. All energy used to propel Vehicle come from falling mass not exceeding 1.50 kg. The mass is part of the energy propulsion system and does not directly contact the venue floor. |
| T | F | T | F | 3.d. The stopping mechanism is contained completely within the Vehicle and work automatically. The Vehicle is not remotely controlled or tethered. |
| T | F | T | F | 3.e. Egg rests on two $\frac{1}{4}$ " wooden dowels extending 3.0-4.0 cm from rigid, unpadded and flat backstop. Bottom of wooden dowels are 5.0-10.0 cm above Track and within 1.0 cm from bottom of backstop. Egg backstop is built of rigid material and has a flat surface of 5.0 ± 0.5 cm wide by 5.0 ± 0.5 cm high by 1.1 cm or thick. |
| T | F | T | F | 3.f. A $\frac{1}{4}$ " wooden dowel is attached vertically and directly to the top of the rigid backstop and it extends ≥ 20.0 cm above the Track's surface. |
| T | F | T | F | 3.h. Any additional sources of kinetic energy is in their lowest energy state in the ready-to-run configuration. Any pre-loaded energy storage devices do not provide kinetic energy to propel the Vehicle. |
| T | F | T | F | 3.i. Competitors design the Scrambler to start by using an unsharpened #2 pencil with an unused eraser to actuate release mechanism. Actuating release mechanism does not impact additional energy to Vehicle. |
| T | F | T | F | 3.j. All parts of the Vehicle moves as a whole; no anchors, tethers, tie downs, or other separate pieces are used. The only parts to contact the floor during the run are those already in contact with the floor in the ready-to-run position. All wheels are in contact with the floor at launch. No pieces fall off during the run. |
| T | F | T | F | 3.k. No electrical or electronic devices are used on the Scrambler, its alignment devices, or any tools. |

5. _____ 10. _____ **THE NUMBER OF CONSTRUCTION PARAMETERS MET (Max = 10)**

Competition Parameters:

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| T | F | T | F | 6.a. Once participants enter the event area to compete, they do not leave or receive outside assistance, materials, or communication until they are finished competing and have left the event area. |
| T | F | T | F | 6.c. Electric/electronic tools are not used except for calculators. |
| T | F | T | F | 6.d. In the ready-to-run configuration, the pointed tip of the egg is placed even with the Start Line. All parts of the Scrambler is behind the Start Line where the release mechanism is actuated. The Scrambler remains at the starting position without being touched until triggered by the #2 pencil. |
| T | F | T | F | 6.g. Only non-electronic sighting/aiming devices are used. If placed on Track, they are removed before run. |
| T | F | T | F | 6.h. Team does not roll the Vehicle on the floor of Track on the day of the event without tournament permission. |
| T | F | T | F | 6.i. Any substances applied to the device are approved by the Event Supervisor prior to use and do not damage or leave residue on the floor, Track, and/or event area. The Track remains dry at all times. |
| T | F | T | F | 6.k. Once the run starts, team do not follow their Vehicle and waits until called by the ES to retrieve it. |
| T | F | T | F | 6.l. The Vehicle passes the 7.25 m Line. Mark this as "True" if the Vehicle does not pass the 0.25 m Line. |
| T | F | T | F | 6.m. The egg is not broken. (If the egg breaks on the first run, mark the second run is a failed run (item 14)) |
| T | F | T | F | 6.n. No parts of the Vehicle (besides maybe the egg) touches the Terminal Barrier. |

6. _____ 11. _____ **THE NUMBER OF COMPETITION PARAMETERS MET (Max = 10)**

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| 7. _____ | 12. _____ | 7.f. Run Time: Time (sec) from when the dowel of the Vehicle reaches the 0.25 m Timing Line and ends when it passes the 7.25 m Timing Line. Put 0 for Failed Runs or if the Vehicle stops before 7.25 m Line. |
| 8. _____ | 13. _____ | 7.e. Vehicle Distance: point-to-point distance, in centimeters to the nearest 0.1 cm, from the center of the Terminal Barrier to the pointed end of the egg (or the point of impact for broken eggs). |
| 9. <u> T </u> <u> F </u> | 14. <u> T </u> <u> F </u> | 6.o. Failed Run: any run where Vehicle stars before ES is ready, its distance cannot be measured, Vehicle travels in the wrong direction, Vehicle does not go at least 0.25 m, team pushes the Vehicle down track, or any run that does not occur in the 8 minutes. If the egg breaks on the first run, second run is a failed run. |

15. T F General Rule: The team is disqualified. (Notify the team and their coach as soon as possible.)

