INSTRUCTIONS: This Checklist provides a list of possible violations to aid in inspection and running of the event. Mark Violations with 'X'. Below; Circle 'Y' to the right if a Violation is found for matching rule.

**Event Parameters**

2.a. Impounded
- Not Impounded: [ ] Vehicle [ ] Ramp [ ] Alignment Device(s), if any [ ] Spare parts, if any

2.c. Design Questions
- [ ] Cannot Answer  [ ] Built by others

**Practice Log**

4.a. Parameters
- Missing: [ ] Target Distance [ ] Vehicle Distance from Target
  - [ ] 3rd Parameter (e.g. # of axle turns, drive arm length, alignment angle, ...)

4.b. Impounded
- [ ] Log not Impounded

**Construction Parameters**

3.c. Vehicle Mass
- [1] [2] [3] Vehicle Mass > 2.000 kg

3.d. Electronic/Electric
- [1] [2] [3] Electronic or Electric Device(s) Used (except calculator)

3.e. Dowel Rod
- [1] [2] [3] Not approximately 1/4" round
- [1] [2] [3] Not approximately perpendicular
- [1] [2] [3] Part of vehicle (excluding wheels) extending > 0.5cm beyond dowel rod

3.a. Energy
- [1] [2] [3] Kinetic energy sources other than gravitational are not at lowest state in ready to run
- [1] [2] [3] Propulsive energy coming from other than gravitational potential energy

3.b. Design Questions
- [ ] Distance (point to point) from the Measurement Point to the Target Point measured to the nearest 0.1 cm

3.f. Dimensions
- Vehicle and Ramp combined size in Ready to Run
  - [1] [2] [3] Base > 50.0cm by 50.0cm
  - [1] [2] [3] Height > 100.0cm

3.g. Vehicle Parts
- [1] [2] [3] All parts do not move as a whole
- [1] [2] [3] Parts fell off the vehicle or ramp
- [1] [2] [3] Parts other than wheels in contacted with ground

**Does the Vehicle Have a Construction Violation? (Any 'Yes' Above is a 'Yes')**

The Competition

5.a. Outside Help
- [1] [2] [3] Competitors left after starting to compete
- [1] [2] [3] or received outside assistance, materials, or communication

5.c. Electric Tools
- [1] [2] [3] Used electric tools (except calculator)

5.d. Start Line
- [1] [2] [3] Ramp/Vehicle will not remain in place untouched

5.f. Sighting Device
- [1] [2] [3] Electric sighting/aiming used
- [1] [2] [3] Sighting/aiming left on track during run
- [1] [2] [3] Sighting/aiming left on vehicle causes vehicle mass > 2.000kg

5.g. Rolling On Floor
- [1] [2] [3] Vehicle was rolled on floor of the track

5.h. Cleaning
- [1] [2] [3] Substances applied to vehicle without ES prior approval
- [1] [2] [3] Substances damage or left residue on the floor or floor wet

5.i. Pencil/Followed
- [1] [2] [3] Pencil not used to start
- [1] [2] [3] Vehicle was pushed or held
- [1] [2] [3] Ramp touched or held during release
- [1] [2] [3] Competitors did not wait to be called to retrieve their vehicle

**Does the Vehicle Have a Competition Violation? (Any 'Yes' Above is a 'Yes')**

Run Parameters

7.d. Distance
- Distance (point to point) from the Measurement Point to the Target Point measured to the nearest 0.1 cm

5.k. Failed Run
- [1] [2] [3] Started before ES is ready
- [1] [2] [3] Picked up before measurement
- [1] [2] [3] Time and/or distance cannot be measured
- [1] [2] [3] Does not occur in 10 minutes

Competitors informed of run's violations at end of run and before next run

General Rule
- Disqualified (notify the team and their coach as soon as possible)

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Final Score: __________________________

Team Name: ____________________________

Student Names: __________________________________________

Reason: __________________________________________

Competition: GRAVITY VEHICLE C - 2021

Lane Boss: ________________________  
Competitors: Acknowledgement of Recorded Values: ____________________________  20201218

Violations Found

<table>
<thead>
<tr>
<th>Event Parameter</th>
<th>Violation Found</th>
</tr>
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<tbody>
<tr>
<td>2.a. Impounded</td>
<td>N Y N Y Y</td>
</tr>
<tr>
<td>2.c. Design</td>
<td>N Y N Y N</td>
</tr>
<tr>
<td>3.c. Vehicle</td>
<td>N Y N N N</td>
</tr>
<tr>
<td>3.d. Electronic</td>
<td>N Y N N N</td>
</tr>
<tr>
<td>3.e. Dowel Rod</td>
<td>N N Y Y N</td>
</tr>
<tr>
<td>3.a. Energy</td>
<td>Y N Y N Y</td>
</tr>
<tr>
<td>3.b. Design</td>
<td>Y N Y N N</td>
</tr>
<tr>
<td>3.f. Dimensions</td>
<td>Y N Y Y N</td>
</tr>
<tr>
<td>3.g. Vehicle</td>
<td>Y N N Y N</td>
</tr>
<tr>
<td>5.a. Outside</td>
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</tr>
<tr>
<td>5.c. Electric</td>
<td>Y N Y N N</td>
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<tr>
<td>5.d. Start Line</td>
<td>Y N Y N Y</td>
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<tr>
<td>5.f. Sighting</td>
<td>Y N Y N Y</td>
</tr>
<tr>
<td>5.g. Rolling</td>
<td>Y N Y N Y</td>
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<tr>
<td>5.h. Cleaning</td>
<td>Y N Y N Y</td>
</tr>
<tr>
<td>5.i. Pencil</td>
<td>Y N Y N Y</td>
</tr>
</tbody>
</table>
Rule 3.d - 1/4" round wooden dowel requirements

Rule 7.d - Vehicle Distance is a point-to-point distance from the Measurement Point to the Target Point

Rule 3.f The Vehicle and the Ramp including the release mechanism, in the ready-to-run configuration, must completely fit within an imaginary rectangular box with a 50.0cm x 50.0cm base and a height of 100.0 cm. A starting pencil used as part of the release mechanism may extend beyond the dimensions of the imaginary box.