

2019 Mousetrap Vehicle Score Sheet (Subject to Revisions)



School Name: _____ **Team** _____ **(Circle One):** V JV1 JV2 JV3

Student Names: _____

2a	A single vehicle, spare parts, and any additional parts needed are impounded prior to competition (IV)	Y	/	N
2a/4b	Practice log impounded properly (500)	Y	/	N
4a	Practice log completed [10+ runs with vehicle distance, cup distance, run time, and one vehicle parameter] (250)	Y	/	N
3a	All propulsive energy comes from (1) or (2) snap mousetraps of base 6.0cm x 12.0cm or smaller. No part of hammer extend more than 1.0cm beyond the base. Mousetrap retains all original and structural integrity [no welding, bending, or cutting]. Items added [through soldering, taping, tying, gluing, and clamping]. No more than (4) holes in base of mousetrap for attachment. (III)	Y	/	N
3d	No electrical/electronic components or devices used (III)	Y	/	N
3f	Wheels/treads fit entirely in a 40 cm x 40 cm space of any height. Axles, drive arms, etc may extend beyond (III)	Y	/	N
3e	Participants can answer questions regarding design, construction, and operation of the device (III)	Y	/	N
		Run 1		Run 2
2c	<i>Participants must wear eye protection. Any without will not be allowed compete</i>	Y	/	FR
3b	Any additional sources of kinetic energy are at lowest state in ready-to-run configuration (III)	Y	/	N
3c	Vehicle was not remotely controlled or tethered and stopped and reversed automatically (III)	Y	/	N
3e	<ul style="list-style-type: none"> • An approx. ¼” round wooden dowel is attached to vehicle approx. perpendicular to floor • Bottom of dowel is ≤1.0cm from track surface and easily accessible by ES (III) 	Y	/	N
3g	Only non-electric sighting/aiming devices used. Devices removed from track before run (III)	Y	/	N
3h	All parts of vehicle move as a whole. Only parts contacting the floor were the wheels/treads and any part already in contact with the floor in ready-to-run. No piece fell from vehicle during run. (III)	Y	/	N
5a	Participants did not leave the area or receive outside assistance, materials, or communication (II)	Y	/	N
5c/5d	Cup was placed upside down covering the Start Point. Vehicle dowel is touching the cup and the vehicle remained at the starting position without being touched. (II)	Y	/	N
5f	Teams did not roll vehicle on the floor of the track. (II)	Y	/	N
5g	Substances used did not damage or leave residue on the floor, track, or event area. (II)	Y	/	N
5h	Vehicle is started with a trigger and actuated using any part of an ES supplied pencil in a motion approx. perpendicular to the floor. Team did not touch or hold vehicle while actuating (II)	Y	/	N
5i	Failed Runs occur if time / distance can not be measured <ul style="list-style-type: none"> • If vehicle starts before ES is ready • If participants pick up vehicle before it is measured • If the vehicle moves backwards at the start 	FR		FR

Run Time (in seconds to nearest .01, between 0.50 m Line and the 8.50 m Line, or whenever vehicle stops if 8.5 m is not reached) Use 3 timers / use middle time		
Cup Distance: (point to point distance in cm to nearest .1cm from the Cup Target Point to closest part of the cup. If cup covers Cup Target Point, distance = 0.0cm)		
Vehicle Distance (point to point distance in cm to nearest .1cm from front bottom edge of dowel to Vehicle Target Point)		
Initial that recorded data was verified with team		

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Tier and Penalties: Practice log: +250 if incomplete, +500 if not impounded Tier I: Run with no violations Tier II: Run with any competition violations (noted by rule 5) Tier III: Run with any construction violations (noted by rule 3) Tier IV: Vehicle not impounded properly	I II III IV
Run Score = (Vehicle Distance) + (Cup Distance x 2) + (Run Time) + Penalties	

Low Final Score wins. The Final Score must be the lower of the 2 run scores. The Final Score of a vehicle with one Failed Run must be the other Run Score. Circle lower of 2 Run Scores above.