



MOUSETRAP VEHICLE B

Team Checklist – 2022

Rank: _____

Tier: _____

Final Score: _____

Team Number: B School & Team Name: _____

Student Names: _____

CHECK IN & PRACTICE LOG

1. T F 2.a. Team impounds one Vehicle, any alignment devices, and any additional/spare parts. The Vehicle is impounded with the mousetrap in its lowest potential energy state compared to an unmodified mousetrap.

2. T F 2.c. Participants properly wear eye protection at all times. (If false, do not run and team receives participation points.)

3. Complete 4.a. Is the Practice Log complete, incomplete or not impounded/missing? (Circle one)
Incomplete Complete means including 3 or more parameters (Target Distance, Vehicle Distance from Target, and 1
Not Impounded/Missing additional) for 10 or more practice runs. Logs must include the Team name and number.

1ST RUN 2ND RUN 3RD RUN ← VEHICLE RUNS (10 MINUTES FOR UP TO 3 RUNS)

Construction Parameters:

T F T F T F 3.a. All propulsive energy comes from one or two snap mousetrap with a base 6.0 cm by 12.0 cm or smaller and no parts of the jaw/hammer extending more than 1.0 cm beyond the base. The mousetrap retains all of its original parts, and its structural integrity is not altered. Any items added do not increase the potential energy of the unmodified mousetrap. If holes are drilled in the mousetrap, there are ≤ 4 holes and they are used to attach the mousetrap to the Vehicle.

T F T F T F 3.b. No additional sources are used to provide kinetic energy to propel the Vehicle.

T F T F T F 3.d. Electronic components and electric devices are not used.

T F T F T F 3.d. A jumbo paperclip is attached to the front of the Vehicle and bent so that one end of it is pointing down toward the Surface of the Track. The paperclip is not cut or shortened. The Measurement Point extends ≥ 0.5cm beyond the front of all parts of the vehicle except the drive arm and drive string. The Measurement Point is < 1.0 cm above the surface of the track. The Measurement Point is easily accessible and can be clearly seen.

T F T F T F 3.e. In the ready-to-run configuration, all wheels/treads (in their entirety) fit in a 40.0 cm by 60.0 cm space of any height and any orientation. Axles, drive arms, and other parts of the Vehicle may extend beyond these parameters.

T F T F T F 3.g. All parts of the Vehicle move as a whole with no anchors, tethers, tie downs, launching ramps, or other separate pieces. The only parts contacting the floor during the run are the wheels/treads, drive string(s), and any parts already in contact with the floor in the ready-to-run configuration. No pieces fall from the Vehicle during the run.

4. T F 9. T F 14. T F RUN MEETS ALL CONSTRUCTION PARAMETERS ABOVE

Competition Parameters:

T F T F T F 5.a. Once participants enter the event area, they do not leave or receive outside assistance, materials, or communication.

T F T F T F 5.c. Except for the calculator, electric tools are not used.

T F T F T F 5.d. In the ready-to-run configuration, the Vehicle's Measurement Point is over the Start Point. The Vehicle remains at the starting position without being touched.

T F T F T F 5.f. Only non-electric sighting/aiming devices are used. If placed on the Track, they are removed before each run. Lines existing on the floor prior to the run are not used.

T F T F T F 5.g. Team does not roll the Vehicle on the floor of the Track on the day of the event without tournament permission. If it is permitted, only participants are present.

T F T F T F 5.h. Any substances applied to the Vehicle 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 T F 5.i. Team starts the Vehicle using any part of an unsharpened #2 pencil with an unused eraser, supplied by the Event Supervisor, in a motion approximately perpendicular to the floor, to actuate a trigger. Team does not touch the vehicle to start it, hold it while actuating the trigger, or "push" the Vehicle to get it started. Once the run starts, the competitors move outside of the lane, do not follow the Vehicle, and wait called by the Event Supervisor to retrieve their Vehicle.

T F T F T F 5.j. Vehicle travels forward with Measurement Point clearly passing the 1 m line, then reverses

5. T F 10. T F 15. T F RUN MEETS ALL COMPETITION PARAMETERS ABOVE

6. _____ 11. _____ 16. _____ 7.b. **Run Time:** Time (sec) from Vehicle's first movement until a complete stop (including recoil)

7. _____ 12. _____ 17. _____ 7.e. **Vehicle Distance:** point-to-point distance, in centimeters to the nearest 0.1 cm, from the Measurement Point to the Target Point

8. T F 13. T F 18. T F 5.l. **Failed Run:** any run that does not occur in the 10 minutes or any run where the Vehicle starts before the Event Supervisor is ready, has a distance that cannot be measured (e.g. participants pick it up before it is measured), or is pushed down the Track

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