

**The Challenge:** Redesign your vehicle
 to go ***as far*** as possible.

**Challenge Supplies:**Mousetrap vehicle, ruler, tape,
a flat 10 m (30ft) long area of floor

**Difficulty:** Easy-Medium



**Before you start…** Make sure you have built
a **Mousetrap Vehicle** for use on this challenge.

Documents & supplies at teachergeek.com/learn





Add materials to
the floor to add
friction & difficulty.







**Ways to Play:**Scoring: Set the trap and let it go!
When it stops, take a piece of tape
(with your vehicle/team name on it).
Keep **redesigning** and **retesting** - if your
vehicle travels farther than a previous run,
move the tape to mark this *new distanc*e.

**Customize & Brand Your Vehicle With The
STEAM Sheets** at teachergeek.com/learn



**Constraints:** (rules and limits for your design)

**Allowable Materials**
• TeacherGeek components
• Recycled food packaging
• Other available materials
 (wood, plastic, etc.)

**Geometry**
•At the start of the competition,
 vehicles must fit within a
 50cm x 50 cm x 50cm area.

**Function**• Your vehicle’s wheels must
 begin behind starting line.
• Measure the distance the
 vehicle travels to its front wheels.

**Time Limit:**You will have \_\_\_\_\_\_\_\_\_\_\_\_to complete the challenge.

*The time from building and
re-designing your vehicle
to the start of the competition.*

Fill in how much
time you have



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| --- | --- |
|  | **Distance Reached by Mousetrap Vehicle in One Long Shot** |
| **Vehicle or Design Name** | **Run #1** | **Run #2** | **Run #3** | **Run #4** | **Run #5** | **Run #6** |
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**6.5 miles**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Set: \_\_\_\_\_\_\_\_\_\_

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|  |  |  |  |  | **Revolutions/Distance Ratio** |  |  |  |  |  |  |
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|  |  |  |  |  |  |  | Revolutions to Looped Clip/Mousetrap(Independent Variable) |  |  |  |  |



Distance Traveled

(Dependent Variable)