# MOUSETRAP VEHICLE LONG SHOT CHALLENGE



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



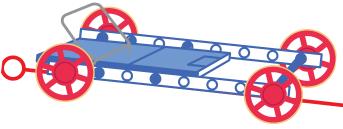
Before you start... Make sure you have built a Mousetrap Vehicle for use on this challenge.

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 distance*.







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

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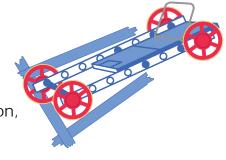
Constraints: (rules and limits for your design)

#### **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.

ര	Time	Limit:
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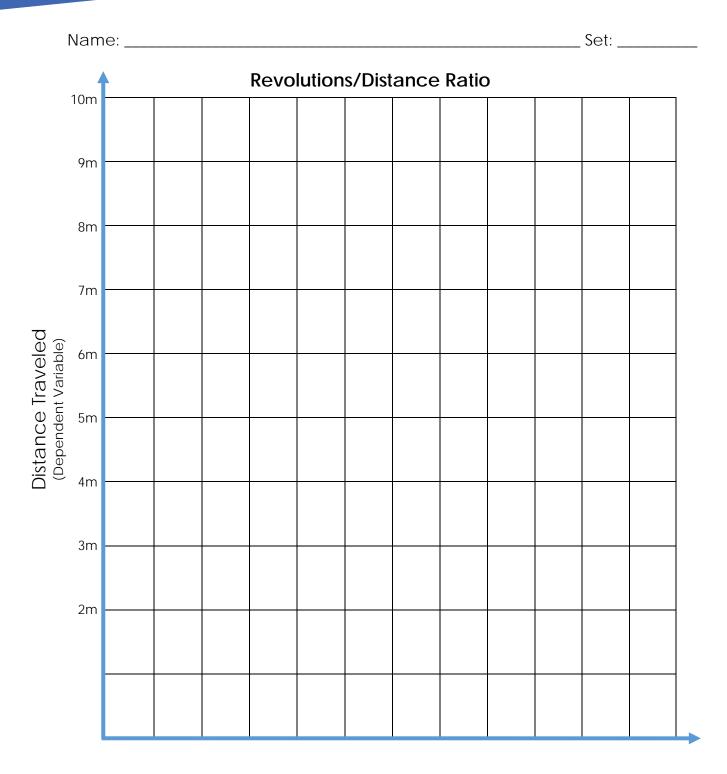
You will have to complete the challenge.

Fill in how much time you have The time from building and re-designing your vehicle to the start of the competition.

	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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Revolutions to Looped Clip/Mousetrap (Independent Variable)

