

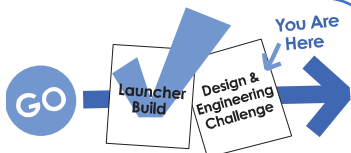


Projectile Launcher Moving Target Challenge

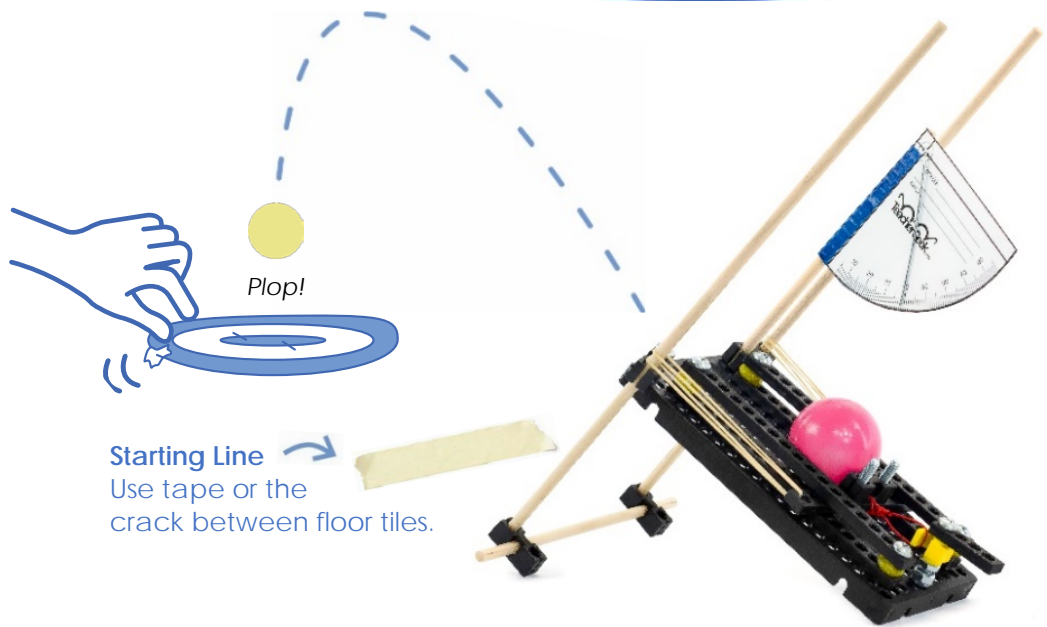


The Challenge

Keep one step ahead!
Redesign your launcher to hit a moving target – best shot, wins!



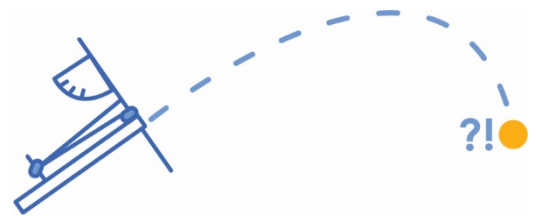
Before You Start: Make sure you have built a launcher for use on this challenge.
Documents & Supplies at: teachergeek.com



Starting Line
Use tape or the crack between floor tiles.

3, 2, 1 ... Launch!

1. Aim. Take **three shots** and try to hit the **bull's-eye**!
2. Record your distances on an Engineering Notebook Sheet.
3. Redesign your launcher.
4. Repeat for the next location.



Constraints

(rules and limits for your design)

▶ Challenge Supplies:

Launcher (from Build Guide), protractor, bucket or target material, ruler, tape, stop-watch, ping pong balls

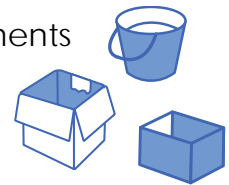
▶ Difficulty: Easy-Medium

▶ Teacher's Note:

Find more information on setting up targets and running this challenge, in the [Launcher Classroom Overview](#).

▶ Allowable Materials:

- TeacherGeek Components
- Found & Recycling Bin
- Teacher Approved
- Non-Hazardous



▶ Ground Rules:

- Launch from behind the starting line
- Judges check if targets are hit successfully



Time Limit:

Fill in how much time you have

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



Projectile Launcher Engineering Notebook



Design #: _____

Name: _____

Date: _____

1

What problem do you want your design (launcher) to solve?

2

Draw your new design.

Tip: think of the trigger, launcher angle, amount of rubber bands, etc.

3

Build it.

