Projectile Launcher Bull's-eye Challenge

TeacherGeek

The Challenge

Target C

Target B

Target A

Boing!

Ready, Aim, Fire!
Redesign your launcher to hit three targets – *shoot for the center to win!*

Starting Line
Use tape or the crack between floor tiles.

GO → Launcher Build → Design & Engineering Challenge → **You Are Here**
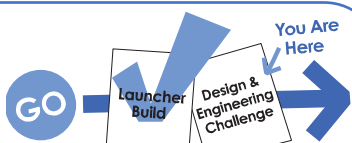
Before You Start: Make sure you have built a launcher for use on this challenge.
Documents & Supplies at:
teachergeek.com

3, 2, 1 ... Launch!

1. Adjust the angle and trigger design.
2. Aim. Take three shots and try to hit **Target A**!
3. Record your results on an Engineering Notebook Sheet.
4. Repeat for **Targets B & C**.

Accuracy is how close you get to the *actual* (true) target or goal (e.g. center of target).

Precision is how *consistent* (repeatable) your results are.

Constraints
(rules and limits for your design)

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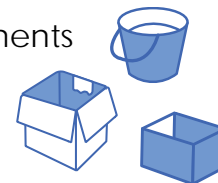Launcher (from Build Guide), protractor, bucket or target material, ruler, tape, stop-watch, ping pong balls

▶ **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.