



QCESC CATAPULT CONTEST

16 FEB 2008



- **Objective:** Design, construct, and demonstrate a catapult to hurl a wiffle golf ball at a target 30 feet away with the best accuracy.
- **Design Parameters:**
 - ***Materials:*** Any building material (wood, metal, plastic, cardboard).
 - ***Energy:*** Energy must be derived from human power. No electricity or air is to be used in any way (i.e., batteries, portable generators, or air cylinders).
 - ***Size:*** The catapult must fit in a 2x2x2 feet box.
 - ***Projectile:*** The projectile will be a wiffle golf ball provided at the competition.

■ **Launch Process:**

- All teams will have five minutes to practice at the firing line before competing.
- All launchers will fire from the same location (firing line).
- The launcher must be moved to the firing line by hand.
- The catapult must sit on the floor. No hand held types.
- Each team will have a maximum of ten minutes total to take seven shots. The clock will start after the first shot is taken.
- The firer will await the judges notification to commence firing. The firer will announce “Fire” each time a shot is taken.
- After all seven shots are taken; the team will move its catapult back to the staging area to await competition completion.

■ Scoring/Judging:

- Seven shots will be taken, the closest five shots to the target will be recorded. The final score is the average distance (x) of the closest five shots or shot accuracy as shown in Figure 1.
- In the event of a tie, the lightest catapult will be declared the winner.
- Judges have the right to disqualify those teams for unsportsmanlike conduct.
- All decisions by the Judges are final.

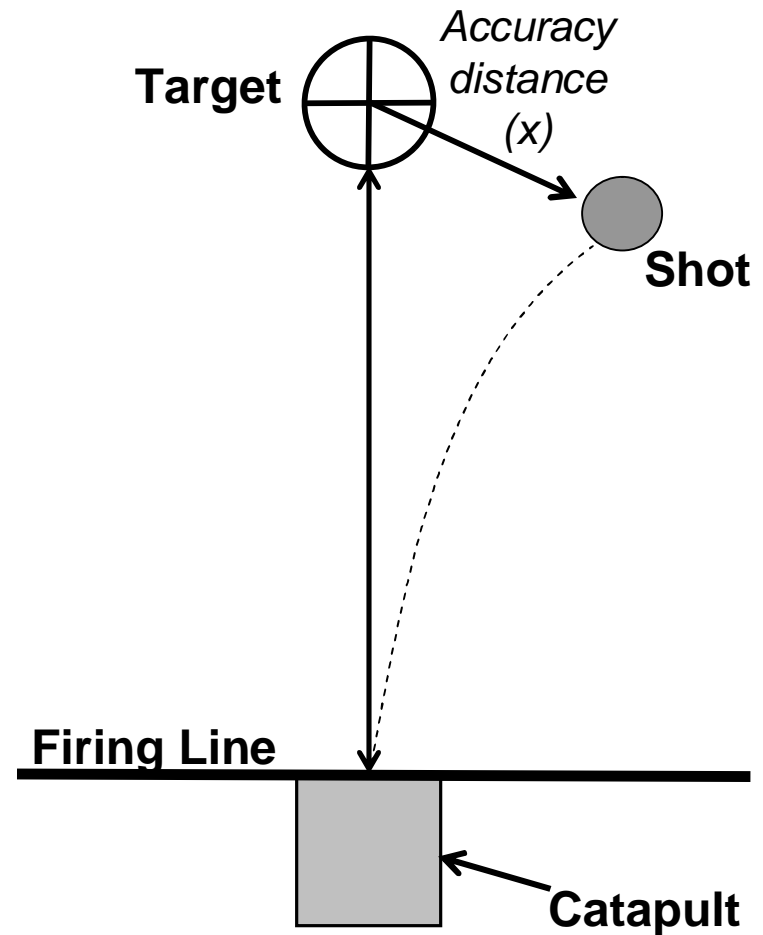


Figure 1. Firing line and target setup.