

Event: Catapult

Description:

Competitors will build and calibrate their own free-standing (not hand held) trajectory device that must be capable of “lobbing” a golf ball at a target placed between 2 and 5 meters.

Number of participants: 1 or 2

Approximate Time: 10-20 minutes

The Competition:

1. Competitor(s) will bring their own homemade catapult to the competition. This device must be designed and built by the competitor (some adult assistance is acceptable).
2. Each competitor may bring their own unmodified golf balls to compete with or some will be provided by the judges.
3. Launch force must be provided by gravity or elastic solids (such as springs or rubber bands).
4. At no time should the device reach higher than 50cm from the ground.
5. A simple chart or diagram documenting 3 test launches will be required for the competition. Information included in diagram is left up to the competitor(s), but at minimum should show the date, distance launched, and a description of the size/weight/type/amount of whatever is used to launch the catapult.
6. The device will sit on a level area of ground and fire at the target area which will also be near ground level. The target area will be a sand pit of at least 1 meter in diameter. A small object level with the sand will mark the center target.
7. The distance from the foul line to the center of the target will be announced at the start of the competition. Students may place their device at any point behind the foul line up to 2 meters (see diagram).
8. Devices are NOT required to be launched remotely (by trigger, or by pull of string)
9. Target will be a shallow, 1 meter x 1 meter sand pit with a small center target.

Scoring:

1. Competitor(s) will shoot at the target four times. The first shot will be practice; the second and third shots will count toward the score; the fourth shot will be used in case of a tie. The distance from the center target will be measured after each shot, including the practice shot, and announced to the team to allow them to make adjustments. The two scoring shots will be added together to make the teams final score.
2. The distance from the center of the target will be measured to the golf ball’s initial point of impact as determined by the judge. Golf balls landing outside of the sand pit area will also be measured according to the initial point of impact as determined by the judges.
3. If a diagram or chart documenting the competitors’ test launches is not presented (or is deemed incomplete), the competitor will be assessed a 10% scoring penalty.

