

National Engineers Week 2015

Idaho State University

Tennis Ball Catapult Competition

Goal:

Create a lightweight catapult that will accurately launch a tennis ball 30 feet.

Rules/Judging:

1. Dimensions of catapult cannot exceed 3 feet in length, 3 feet in width, or 3 feet in height.
2. Catapult should launch a tennis ball aimed to hit a target 30 feet away.
3. Any type of material can be used to build catapult.
4. Catapult can be launched by pulling back by hand or by trigger release mechanism.
5. Each team will get 3 launches.
6. After the 1st launch, catapult cannot be repositioned or altered in any way.
7. No more than three team members per catapult

Score:

Overall score will be equated as follows:

$$Total\ score = \frac{weight\ of\ catapult}{average\ weight\ of\ catapults} * (DFT_{Shot\ 1} + DFT_{Shot\ 2} + DFT_{Shot\ 3})$$

$$DFT = Distance\ from\ target\ (inches)$$

The team with the lowest score wins!

Prizes and the amount of runner-ups will be determined at the event.

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