

RUBBER BAND CATAPULT

Description:

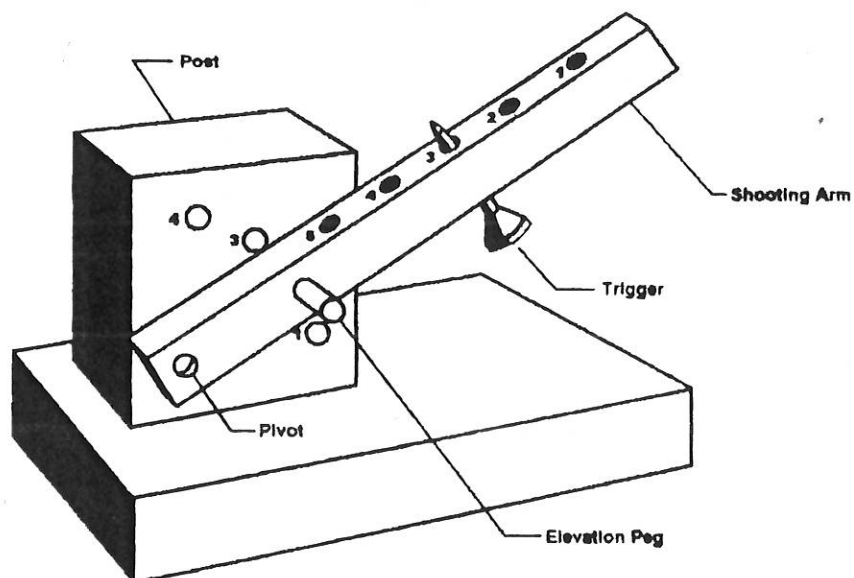
A team of two (2) students will design and construct a catapult device to shoot a rubber band at a target that is placed within a given range.

Number of Participants: 2

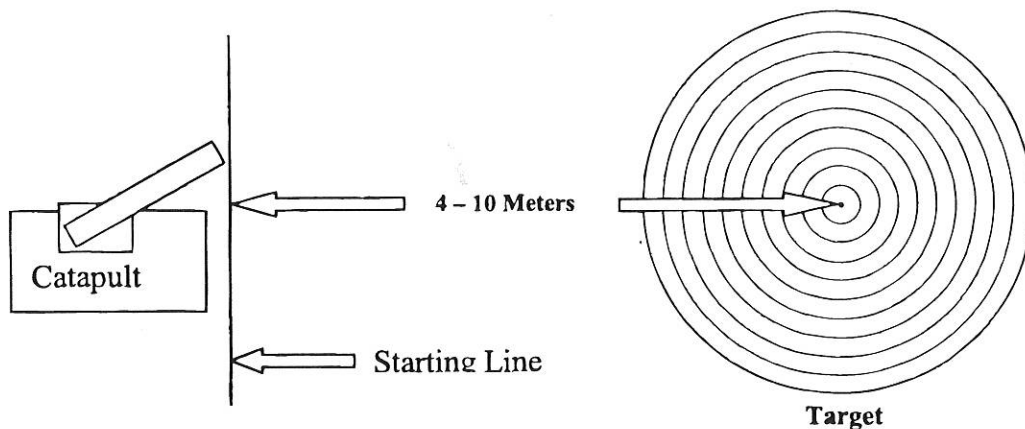
Approximate Time: 20 minutes

The Competition:

1. Students are to design, construct and bring to the tournament a catapult device similar to (but not limited to) the sample below.



2. Catapults are NOT limited to the above design and may be of any size and any material, with as few or as many shooting positions as needed to hit a target.
3. Evidence should be collected and presented on a data table which includes the base positions, shooting arm positions, and the distances traveled
4. The target consists of three to twenty concentric rings with a dot at their center. The smallest ring is approximately 8cm in diameter with approximately 5cm between rings. The center dot is approximately 2cm in diameter. The center of the target will be located between four (4) and (10) meters from the starting line.



5. No part of the catapult may extend beyond the starting line.
6. Contestants will shoot three (3) different rubber bands.
7. Rubber band maximum size limit: 22 cm. (length, not circumference) measured with the rubber band suspended freely, under only its own weight, from a nail or similar object. Rubber bands may not be knotted, linked together or attached to any other material.

Scoring:

1. The score for each shot will be determined by the smallest ring (highest number) any part of a rubber band is touching or inside of when it comes to rest. The smallest ring is worth twenty (20) points, with each successively larger ring worth 1 less point.
2. In addition to the 20 points for the smallest ring, an "X" will be awarded for all shots where any part of the rubber band is touching or within the center dot.
3. The final score will be equal to the sum of the numerical scores for all three shots.
4. The greatest number of points determines the winner.
5. Ties will be broken in favor of the team with: first, the most Xs; second, the most twenties (20), continuing with nineteen's (19) thru ones (1). Any remaining ties will be broken in the same manner comparing each shot, 1st thru 3rd, in order.
6. If ties still exist, the team with the best-prepared data table will win.

Turn in catapult, marked with team name and number, prior to the start of the tournament.