RUBBER BAND CATAPULT

Description: Each team will construct a device to launch a given object a specified distance.
Number of Participants: 2
Competition:
Construction:
1. Device may fit within the description of a catapult (spring-style lever) or trebuchet (counterweight or downward force on one end of a lever).   However, slingshot (ballista or onager) type devices may not be used.
2. The teams will get 15 minutes to construct their launching device.
3. Every team will receive **up to** 3 half pint-sized and/or pint-sized milk cartons, a large amount of masking tape, and a pair of scissors, access to yarn or string.
4. Each team will receive a bag of building materials. All teams will receive the same materials. The materials listed above may be among them, but the actual materials are not limited to the list. No team or coach will know the actual contents of the bags before the event.
5. Only the materials in the bag may be used, and the bag may NOT be used. No additional materials or adhesives may be used.
6. Possible building materials may include: Up to 10 straws; up to 10 toothpicks; up to 10 craft sticks; up to 25cm square of cardboard; up to 10 pipe cleaners; up to 5 rubber bands (assorted sizes); up to 10 large washers [approximate size & weight of a quarter].

Launching
1. The team may hold the device securely while shooting, but the base may not be moved in any direction during propulsion. Neither may the launchers contribute any forward motion to the launch.
2. A series of targets will be set up at different distances from the launching line.
3. Scoring is based on a Bulls-Eye concept. Concentric rings will represent the target. The point value will increase as the rings approach the center, or bulls-eye.
4. Two launches will occur and students can choose any target. The total points from both launches will be the final score.
5. Possible objects to launch: ping-pong ball; golf ball; marshmallow (full size); small wiffle ball.

Scoring: Teams with the most points will be ranked highest.

Tiebreaker: The point difference between shots will determine who has the higher ranking.
Example: Team Y : 1st shot = 75, 2nd shot = 75, total = 150, difference = 0. Team Z: 1st shot = 50, 2nd shot = 100, total = 150, difference = 50. Tie-breaker goes to Team Y.