

Tech Wars 2022 – Niagara County Community College

Competition Category: Middle School & High School Trebuchet Design Challenge

Level of Competition: Middle School/High School

Event Coordinator: Mike Lepkyj mlepkyj@medinacsd.org

PROBLEM:

Design and construct a device that fits the description of a trebuchet. The device will be used to launch a projectile of choice at an 18"x18" target that is 40 feet away.

SPECIFICATIONS:.

1. Schools may enter and register a maximum of **5** teams
2. All catapults must fit within the build dimension of 24"x24"x36 in height." This includes any point of release, cocked or un-cocked (the sling does not count towards these measurements)
3. The maximum length sling that may be used is 24"
4. Students will be given 3 minutes to complete a total of 5 shots at the given target
5. Students must launch from the taped off start line for each throw. Moving their project forward or back to try to adjust for distance will not be allowed
6. Counter weights used to launch the testing device need to be safely attached and secured as to not damage the gym floor
7. Students may add and/or remove counter weights while performing their final testing
8. Students may not borrow or add additional objects from other schools
9. All materials used for the project must be deemed safe by the coordinators at the competition
10. Students must bring their own throwing projectiles the day of competition, however, no projectiles can be deemed damaging by the coordinators (golf balls, marbles, etc.)
11. The face of the target will be an 18"x18" platform set at a 45 degree angle, and measures approximately 12" off of the ground to the bottom of the target
12. Point scoring will be as follows....target hit on
 - a) Shot 1 = 5 points
 - b) Shot 2 = 4 points
 - c) Shot 3 = 3 points
 - d) Shot 4 = 2 points
 - e) Shot 5 = 1 point
13. Points are only scored if the projectile hits the face of the target during its initial launch. Hitting the target legs does not result in points awarded, nor does bouncing off of the ground or wall.

