Contestants will design and construct a catapult / trebuchet that will launch a tennis ball. The challenge will be to design and build a catapult / trebuchet that will throw a tennis ball further than their opponents.

**Size:**

1. Catapults and Trebuchets.

* 2’ x 2’ x 3’ or any combination of 2x2x3 or 3x2x2 or 2x3x2
* The catapult / trebuchet may not exceed 2’ x 2’ x 3’ in the loaded position.
* Height is measured from the ground to the highest point on the catapult.

1. The catapult / trebuchet may be constructed of any material.
   * Keep in mind that you must be able to move your catapult to and from the launch arena.
2. Catapult / trebuchet may use any type of springs, bungees, elastic rope for a power source.
3. Counter-weights may be used on the throwing arm.
4. Wheels may be used.
5. Catapult must be able to fire a tennis ball.
   * The tennis ball will be provided by the contest coordinator.
   * Only the tennis balls provided will be measured for distance.
6. The catapult / trebuchet must designed so that the human body is not above the throwing arm at time for any reason, including loading. Winches, pulleys, and any other device that removes any requirement to be above the throwing arm is encouraged.

**General Rules:**

1. A team sponsor or advisor is required to be present during the competition.
2. Each team will be allowed to launch three times.
3. Teams will be allowed to test fire their catapult one time to check for performance and control.
4. The catapult must be disabled at all times while not in the launch arena.
5. All catapults must be displayed at the contest site for public viewing.
6. The power source for the catapult (springs, bungees, etc) must be removed during the display.
7. Catapults will compete against catapults and trebuchets will compete against trebuchets.

**Safety:**

Personal safety is a must when working with catapults.

1. All participants will be required to wear a hard hat and safety glasses.
   * Failure to do so will result in disqualification of the catapult and team.
2. All catapults must have a safety chain securing the throwing arm while the unit is being setup to fire.
   * The chain must be permanently attached to one side and quick release attached to the opposite side of the catapult frame.
3. All catapults must have a 10’ long release cord.
   * The release must be pull standing the side of the catapult, never from behind.
4. All contestants and schools will be required to sign a release form before competing.

**Judging:**

1. Simple, the catapult with the longest distance wins.
2. Any rule infraction will results a 5 foot penalty on the longest throw per infraction.
3. Awards will be given to 1st, 2nd, and 3rd place only.
4. In the event of a tie, a two round shootout will be held. The team with the longest throw wins.