

WJCL Guidelines for Trebuchet Competition 2018

Challenge:

To build a fully functional authentic counter-weight “gravity powered” trebuchet. The competition is for trebuchets only; no other Roman war machines will be judged. **NO KITS ARE ALLOWED.** Any team using a kit will be automatically disqualified.

Dimensions:

Base: no larger than 2 ft. wide x 3 ft. long.

Maximum height of pivot point: no higher than 2.5 feet from ground

Throwing arm: no more than 3 ft. long

Length of sling: Cannot extend more than 20 inches from end of throwing arm to the far end of the pouch

Building materials:

Body should be wood. Mechanisms may include screws, nails, bolts, fasteners, metal axle, string, leather, tape. No rubber or plastic allowed except for the counterweight. The counterweight can be made of any material. No wheels allowed.

Counterweight:

The entire container must be no more than 5 pounds and must be in a sealed container. (For example, you cannot use a bucket of loose golf balls that may go flying all over the room when the arm goes down.) The container must be removable from the throwing arm so that it can be weighed before firing. It can be made of any material.

Rules:

The only means of providing energy to the trebuchet will be that of a falling mass. No energy can be stored in the deformation of components. That means no springs, rubber bands, flexible wood, or pulleys may be used in the construction. Floating arm trebuchets are not allowed.

Each trebuchet **MUST** be equipped with a remote triggering device. The trebuchet must be able to be launched from a minimum distance of 3 feet to the side of the launch line. This is a safety feature and your trebuchet will **NOT** be able to compete if it does not have a remote triggering device. It can be as simple as 2 metal eyelets, a bolt and a piece of string. For an example of a remote triggering device, (and a home-made trebuchet in great detail), see the pictures at this website: http://www.lukewallin.co.uk/big_projects/trebuchet

Judging criterion:

The winner will be chosen for its ability to throw a 2 to 2.5 inch diameter hacky sack (to be evenly weighed and provided by the judges) the furthest distance and with the most accuracy. There will be 2 sets of throws: one set for distance and the other for accuracy.

Points will be awarded for distance, accuracy and authenticity. There will be automatic disqualification of devices made from a kit or not having a remote triggering mechanism. Points will be deducted for violations of any of the other specifications listed above.

There will be a 15 minute warm up period to allow teams to test their trebuchets and make any last minute adjustments.

