

Trebuchet Qualification Checksheet
(must be completed by team advisor and accompany trebuchet to the competition)

Trebuchet Number: _____
(To be filled by judge)

Qualification Requirements

Adv. Check Judge Check

Trebuchets, and/or their platforms, must have soft feet (felt, or cloth). No rubber or wooden feet are allowed to touch the ground.		
Recoiling trebuchets (with wheels) must be on a platform (board) to stop rolling motion.		
Is the trebuchet safe? No loose parts are allowed that will break free.		
The trebuchet shall consistently throw a squash ball a horizontal distance of at least 30 feet before ground impact to qualify.		
No catapults or catapult/trebuchet hybrids are allowed. No energy can be stored in deformation of components. That means no springs, rubber bands or flexible arms. No pulleys can be used. The counterweight must be attached, not looped over, the end of the arm (or in close proximity). Top pivoting lever must be greater than 1/4" thick.		
The counterweight (see mass m1) is two un-opened 12 oz. soda pop cans.		
The counterweight must be either: a) dangling throughout the entire throwing motion (makes no contact with other parts of the trebuchet lever arm (L2+L5 in the figure)) OR b) must be rigidly attached to the arm (can't slide, jiggle...).		
Is the counterweight attached such that it doesn't come free on its own.		
The top pivoting lever (length L2+L5 on the example figure) must not be able to lift off the ground in the cocked position until the counterweight is attached. Any fastening devices/holders/brackets to be used during the competition will be included as part of the arm during testing for balance.		
The top pivoting lever must be balanced toward the projectile end (see L5 end) throughout the entire range of motion.		
The top pivoting lever (see L2+L5) must not be longer than 12 feet. This length includes the hook.		
The top pivoting lever (see L2+L5) may not be collapsible.		
The height of the center of the pivot point (H) must be less than or equal to 1 foot 9 inches.		
Each trebuchet must be outfitted (i.e. come to the tournament ready) with one plastic 1 gallon milk jug target mounted on the side of the trebuchet in a clearly exposed area. The milk jug is to have the bottom 1" cut off and be inverted. The target opening must be no less than 1.5 feet from the ground, and no more than 2.5 feet from the ground . It must be forward facing, and on the front most pillar or support of the trebuchet. It can be mounted at a decline to the direction of fire of up to 45 degrees (pointing forward and up) if necessary (i.e. so that it is even more exposed). This is what the other teams will shoot at. The operator may not protect the target during competition. If you do not understand these rules, the simple explanation is "put it where everyone can easily hit it." Trebuchets with inadequate targets will not be allowed to participate.		
Judge has dated (year only) and signed trebuchet.	XXXXXXXX	

Check all that apply

Not pre-qualified		Other - put note on back	
Failed 1st qual		Failed 2nd qual	

Qualification Judge's Signature