

Harvest Homecoming – Purdue Pumpkin Chunking Competition

Trebuchet Design Ideas

Below is information that may assist teams in their attempt to win the 2016 Harvest Homecoming Purdue Pumpkin Chunking Competition scheduled for October 4, 2016. All machines in this competition must be “gravity powered”, consisting of a falling weight that accelerates a throwing arm holding the projectile.

Although links may contain alternate energy sources, devices using compressed gas (such as air), explosives, springs, or kinetic motion are not permitted in this competition.

These links are not intended to contain all potential websites or information pertaining to the design of possible entries. Instead, they serve as starting points for each team’s work.

Basic Information

<http://en.wikipedia.org/wiki/Trebuchet>
<http://thehurl.wikidot.com/trebuchet:trebuchets>

Examples

<http://membercentral.aaas.org/blogs/scientia/trebuchets-and-their-modern-use>
<http://www.stormthecastle.com/trebuchet/>
<http://www.instructables.com/id/How-to-Build-a-Trebuchet/>
<https://www.youtube.com/playlist?list=PL05405A4EE6C317DB>

Analysis & Design

<http://www.algobeautytreb.com/trebmath356.pdf>
<http://www.real-world-physics-problems.com/trebuchet-physics.html>
<http://radlinski.org/trebuchet/trebuch.html>
http://www.ronleigh.com/ivytech/_ref-trebuchet-range.htm

Simulators

<http://www.algobeautytreb.com>
<http://www.virtualtrebuchet.com/>