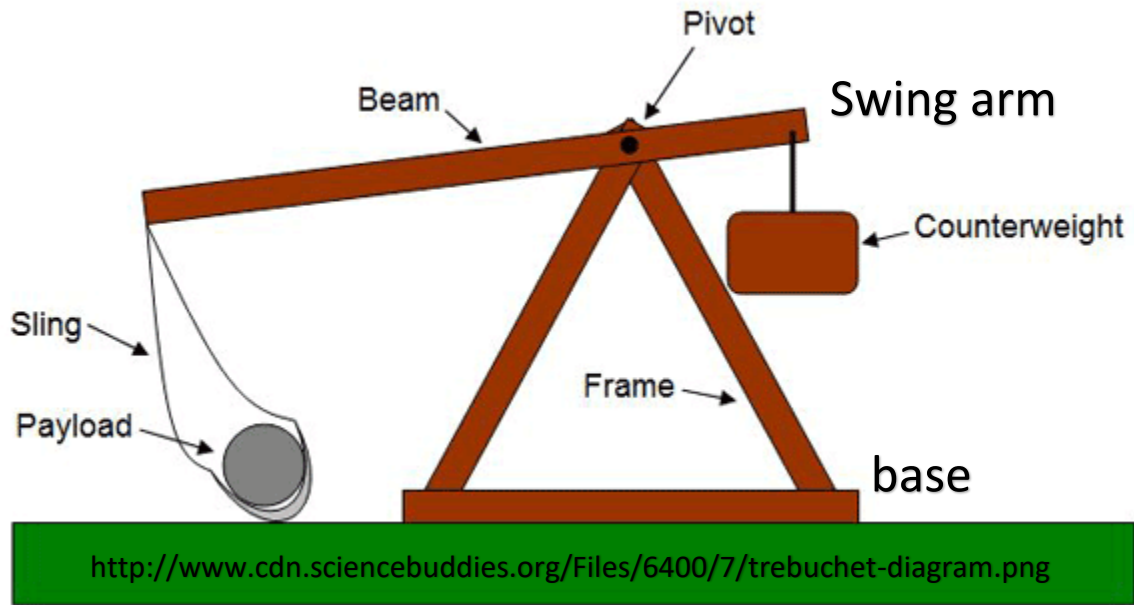


Trebuchet Design Ideas



Principles to consider

Swing arm should be 1 and 1/3 x the length of the base (example base = 12', so swing arm = 16')

Counterweight is 100 to 133x the weight of the payload (example 100 lbs. of weight to throw 1 lb. object)

Uprights should to 5/6s to as long as the base (example: base = 12' long, base height to pivot = 10')

Cross beams/width of the base should be 1/2 the height to the pivot (example: base length = 12', base height = 6')

Pivot point of frame should be at 1/4 of total length (example base is 12' length, so pivot should be 3' from one end)

Relationship between short and long part of swing arm is 1 : 3.75 (example swing arm 16', so pivot should be 3.26')

Sling is same length as long part of arm (example, long part of swing arm = 12.66', so sling length = 12.66')