

Name: _____

Build a Trebuchet!

The Trebuchet was a weapon of war used during the Middle Ages to hurl large stones and other projectiles toward an enemy army. The Trebuchet used the force of gravity in the form of a counterweight. As the counterweight fell, it would rotate an arm (a lever) and launch a projectile.

Problem: Will a trebuchet launch a projectile farther with a long arm or a short arm?

Hypothesis: I think _____

Procedure: Launch your trebuchet three times with the projectile close to the fulcrum. Then launch your trebuchet three times with the projectile far from the fulcrum. Record how far in inches the projectile traveled in each trial.

	Trial 1	Trial 2	Trial 3
Short Arm			
Long Arm			

Conclusion: _____

Problem: What is the best projectile to use with our Trebuchet? Which object will travel the farthest? Will a small object travel farther, or a larger object? Will a heavy object travel farther, or a light object?

Hypothesis: I think that the best object to use as a projectile is a

Procedure: Choose four different items to launch with the Trebuchet. Record the distance that each object travels. Perform three trials with each object.

Object	Trial 1	Trial 2	Trial 3

Conclusion: Which object traveled the farthest? Explain what about that object made it the most effective projectile.
