Catapult Investigation

Problem: What is the efficiency of the catapult

Materials:

* Catapult
* Weights
* Meter sticks

Procedure:

1. Determine the Spring Constant of the Bungee Cord by stretching it with weights and measuring how far it stretches.
2. Knowing the Spring Constant, determine how much energy is stored when the Catapult is in the firing position.
3. If all that energy was converted into kinetic energy how far away should the eraser land? *(Hint: Determine the initial speed using the kinetic energy and measure the angle it is launched at).*
4. Compare how far the eraser actually travels with how far you calculated it should go, what is the efficient of the catapult?