# Trebuchet and Quadratics Data Collection Sheet

As you begin your testing phase, make sure you keep track of all successes and failures. For each iteration (change) of your trebuchet, note every change and a brief justification for the change.

# For each Successful Launch:

* Slow motion video of the launch (Use one of your team members cell phones)
  + Label each video TeamName\_Launch#
* Create a document to record the following:
  + Record length of sling
  + Record weight of counter balance
  + Record distance of tennis ball (first hit on the ground)

**Example**

ApplePie\_Launch2

|  |  |  |
| --- | --- | --- |
| **Length of Sling** | **Weight of Counter Balance** | **Distance of Tennis Ball** |
|  |  |  |

# For each Unsuccessful Launch:

* Slow motion video of the launch (Use one of your team members cell phones)
  + Label each video TeamName\_Launch#
* Create a document to keep track of each failure to launch.
  + Write a detailed description of each unsuccessful launch and how you might change your design to facilitate a success.

**Example**

ApplePie\_Launch1

This launch failed because the sling did not release the tennis ball. We think it is because the catch for the sling did not release on time due to a narrow release. We will change the catch on our trebuchet to have a wider release.