***Potential Energy with Relations to Spring Lab***

* Purpose: To become familiar with the concepts of potential / kinetic energy as well as to

gain a basic understanding of their relationship with springs.

* Equipment: Marble Launcher, Marble, Measuring Tape
* Procedure: 1. Set up the experiment by placing the marble launcher on a flat surface with a

tape measure available for distance measurements.

2. Compress the spring of the launcher, with the marble inside, to the desired

distance.

3. Release the spring allowing the launcher to fire the marble.

4. Measure the distance the marble was launched from the moment of release to

the time the marble contacts the ground.

5. Measure and record the distance that the marble has flown.

6. Repeat the process with the 5 different differences.

* Data / Data Analysis: On Excel Worksheet
* Conclusion: During this lab, we expanded our knowledge of kinetic and potential energy.

Throughout the process, the data was minimally spread due to various

sources of errors. The main source of error would have been that no friction

or air resistance was taken into account, but others include that the distances

were measured by observation, and that the marble launchers were new.