

Name: _____
Advisory: _____

Kinetic Energy Diversion Lab

(Egg Drop)

Assignment:

For this lab we will be conducting an experiment regarding potential and kinetic energy. When an object is falling it contains Kinetic Energy. When the object hits the ground that energy is put back into the object and typically causes damage, breakage, or shattering. To prevent damage to an object that energy must be diverted to something else.

Your task in this lab is to design a device that will protect an egg dropped from a height of 30 feet. You may use any materials you like that you can provide on your own. Your device may not be bigger than 12 inches by 12 inches. Use this form to help guide your design and assessment of your project using scientific method.

Question:

Planning:

In the space below draw a plan for what your device will be.

Hypothesis:

How will your device divert or prevent the kinetic energy from getting to the egg?

Experiment:

Write your observations about what happened when your device was dropped. Did it succeed or fail? If it failed, why did it not work? Did something go wrong?

Observations:

While you watch other students devices drop, write down what kinds of designs worked. Explain how these devices were able to protect the egg.

Conclusion:

On a separate piece of paper explain what happened during the experiment with your device. Explain what you would change about your device if we were to perform the egg drop again.