

Lesson 4: How Does The Energy We Put Into a Toy Compare to The Energy That Comes Out?

Activity 4.2

Purpose

Design an experiment with your group that involves one of the toys provided. The experiment should relate to our studies of elastic energy and should demonstrate the relationship between the elastic energy put into the toy, and the kinetic energy that it becomes. Answer the following questions as you perform your experiment.

+ Safety

Use the elastic toys only to perform the lab. Be careful not to overload the toy as it may become damaged.

What is the independent variable (manipulated variable) for this experiment?

What is the dependent variable (measured/ responding variable) for this experiment?

What are the controlled variables (variables that stays the same) for this experiment? (State at least 3)

Data

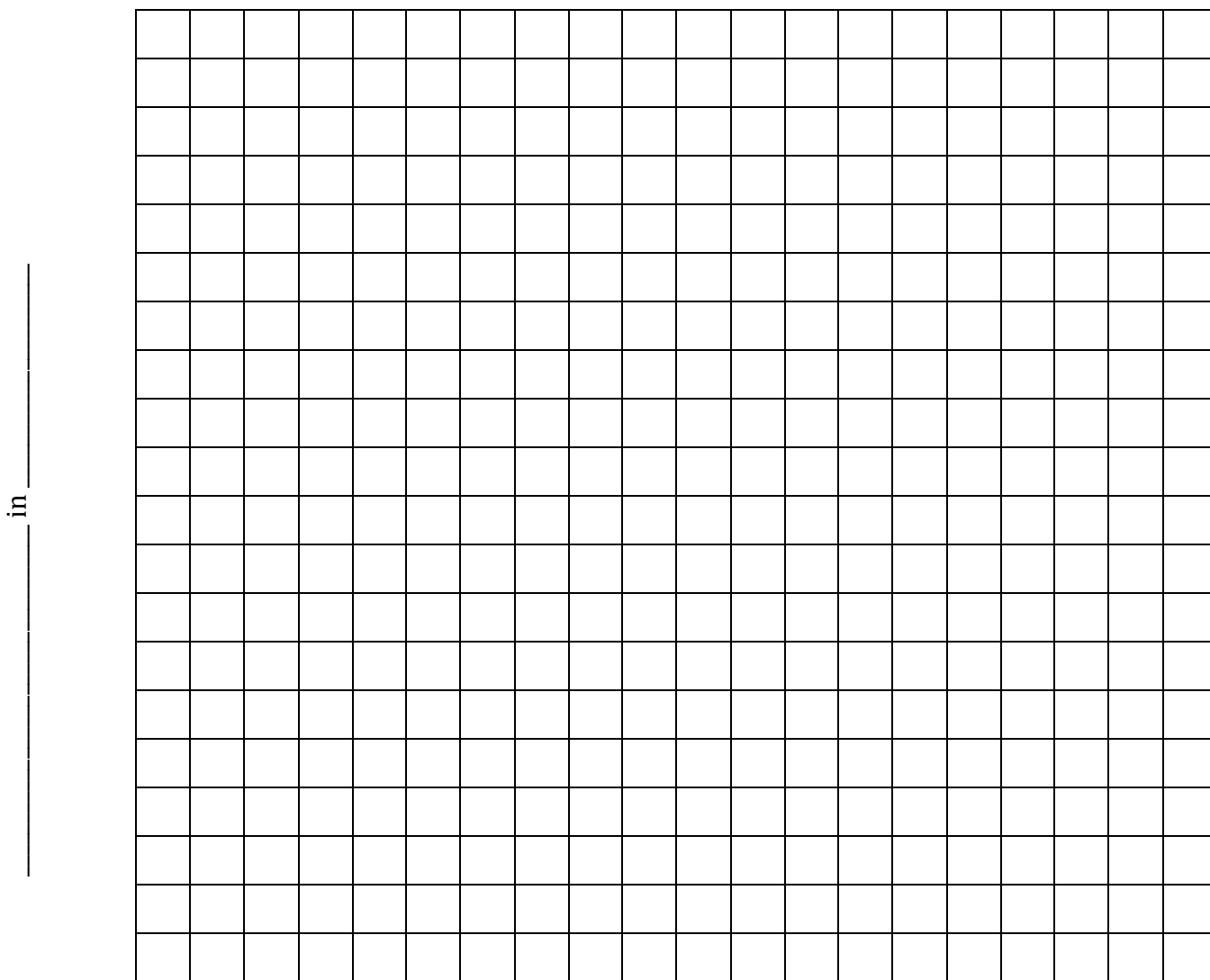
Your Progress:

- Mastery
- Proficient
- Developing
- Beginning

Create a line graph to display your results.

- Labeled X axis with the independent variable, and units.
- Labeled Y axis with the dependent variable, and units.
- Create a key that identifies the colors used and plot the data from your experiment.
- Give the graph an appropriate title that describes both variables.

Title: _____



What conclusions about elastic energy can you draw from your experiment?
