

Lesson 3: What is the connection between height and energy?

Activity 3.1

Purpose

Conduct an experiment in which you find the relationship between the height that a can is dropped and the amount of kinetic energy.

+ Safety

Use the canned goods as directed in the lab. Failure to do so may cause them to break open.

Your Progress:

- Mastery
- Proficient
- Developing
- Beginning

Word Wall:

Gravitational energy: _____

Variables

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 Table

Use this data table to record the measurements from your experiment:

Height of Can		Starting Thickness	Thickness #1	Thickness #2	Thickness #3	Average	Average Thickness Change	Average for both cans
Height = 20 cm	Tuna							
	Beans							
Height = 40 cm	Tuna							
	Beans							
Height = 60 cm	Tuna							
	Beans							

What is the relationship between height and energy?

From which dropping height was the average change in thickness the greatest?

What are the advantages of calculating an average value when doing an experiment?
