

Lab – Super Ball Lab

Purpose: To determine the amount of energy lost when a super ball is dropped and bounces back upwards.

Materials:

- Super ball
- Meter stick
- Triple-beam balance

Instructions:

1. Measure the mass of a super ball.
2. Drop the ball from a height of one meter and measure how high it bounces back. Repeat this for five trials.
3. Complete the following data table:

Trial	Mass of Ball (kg)	Original Height (m)	Height after 1 bounce (m)	PE ₁ (J)	PE ₂ (J)	ΔPE (J)
1-5	measured	measured	measured	mgh_1	mh_2	$PE_1 - PE_2$

4. Calculate the average change in potential energy for the five trials.
5. Be sure to discuss what happened to the “lost” energy as part of the standard conclusion.