

Name _____

Bouncing a Ball

Question: How does the height from which a ball is dropped affect its bounce?

Hypothesis: _____

Materials: rubber ball, meter stick, graph paper, tape

Experiment:

Control: _____

Independent Variable: _____

Dependent Variable: _____

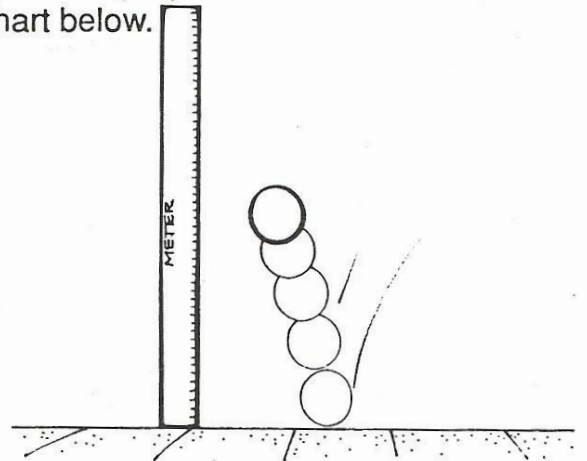
Constant Conditions: _____

Procedure:

1. Tape meter stick to wall. Hold a rubber ball at a height of 15 cm, then drop it.
2. Measure the height to which the ball bounces.
3. Continue increasing the height of the drop by 15 cm. Perform the final drop at 90 cm. Record all the bounce measurements.
4. Make a graph. The horizontal line should show the height of the drop (cm), and the vertical line should show the height of the bounce (cm). Number each axis from 0 to 90 by fives. Plot your data in the chart below.

Data Chart

Height of Drop	Height of Bounce
15 cm	
30 cm	
45 cm	
60 cm	
75 cm	
90 cm	



Conclusion: _____

Extension:

What energy changes occur each time the ball is dropped and bounces? (Answer in terms of potential and kinetic energy.) _____

