

Name _____

Acceleration Lab



PURPOSE: To investigate the acceleration of a golf ball and tennis balls at different heights.

PROCEDURE:

1. Set up the ramp. Elevate it first to the height equal to two textbook laying down. Measure and record this height on the data table.
2. Hold the golf ball at the top of the ramp. When the timer says "GO" release the ball. Other partners will make the ball's position when the timer calls out "1 second, 2 second, 3 second".
3. Measure the distances in cm from the tape marks to the starting point. Record on data table.
4. Repeat the experiment 2 more times.
5. Raise the ramp to a height of the textbooks setting on end. Record the height on the data table.
6. Repeat the experiment three times at this new height. Record the data.
7. With the ramp still at the higher height, repeat the experiment three times using a tennis ball and record.

Type of Ball	Height (cm)	Time (sec)	Trial 1	Trial 2	Trial 3	Average (cm)
		1				
		2				
		3				

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GRAPH THE RESULT ON THE BACK. Only graph the averages. The x axis is time (sec) and the Y axis is distance (cm). You should end up with three lines with three data points on each line.

QUESTIONS:

1. Describe the shape of the graphs. _____
2. Which set up had the steepest slope? _____ Why? _____

3. How did the shape of the graph change when you changed balls? _____
