

Name: _____ Date: _____ Period: _____

Physical Science

Average Speed & Inclined Roll Lab

- I. How does the steepness of a ramp affect the speed of an object?
- II. Materials
 - a. Skateboard, masking tape, protractor, 2 stopwatches, ramp (table)
- III. Procedures
 - a. Record the results in the data table provided
 - b. Place table flat on the ground
 - c. Mark a “starting line” on the table, 1.5 meters from the end of the table mark the “finish line”
 - d. Prop the end of the table up to form an inclined plane, use the protractor to measure the angle of the “inclined plane” and record in the data table.
 - e. Place the skateboard at the “starting line”, release and measure the time it takes to the bottom of the table (record in Time 1), record the time when it crosses the “finish line” & record in Time 2.
 - f. Repeat 2 more times, recording each in the table.
 - g. Raise the angle of the inclined plane by placing books under the table, measure the angle, repeat steps e & f again.
 - h. Raise the height of the table two more times
 - i. Once the data has been corrected, calculate the average times requested, calculate the average speed of each height.
 - j.

Angle	Trial #	Time 1 (to bottom)	Time 2 (to finish)	Average Time 1	Average Time 2	Avg. Time (T2 – T1)	Distance	Average Speed
	1							
	2							
	3							
	1							
	2							
	3							
	1							
	2							
	3							
	1							
	2							
	3							