

The Effect of Slope: Photogates and Hot Wheels

Instructions: Given a pair of photogates and a Hot Wheels track, complete a series of runs keeping distance constant and varying the slope of the track.

- Record the slope of the track and the acceleration at each calculated slope.
- For each slope do 3 trial runs for acceleration. Average these runs to get one value for acceleration.
- Graph Slope vs. Acceleration. Is this a linear function?

<i>Slope (independent variable)</i>	<i>Acceleration (dependent variable) Trial 1</i>	<i>Acceleration Trial 2</i>	<i>Acceleration Trial 3</i>
1.			
2.			
3.			
4.			