Lab 4A: Speed

Key Question:

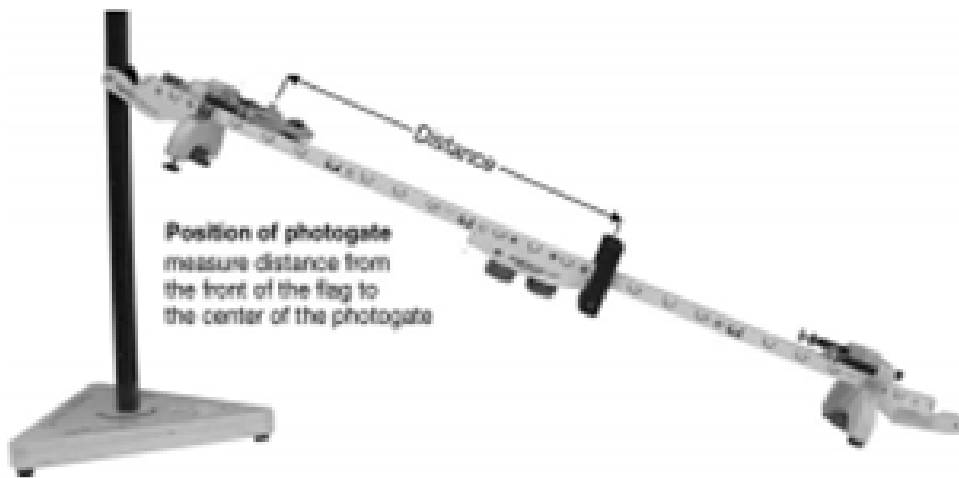Can you predict the speed of the car as it moves down the track?

Background:

Distance: the difference in length between the starting point (origin) and the endpoint

Time Interval: a definite length of time marked between two instants (such as start and stop time)

Formula for Speed: s = d/t

Drawing:

Section 2: Making a Hypothesis   (If, then, because)

a)

Section 3: Setting up the experiment

Our Lab group's ramp is attached on hole # _____

Section 4: Setting up the experiment

a)

b)

c)

Section 5: Doing The Experiment

Table 1: Position, time, and speed data

Position of photogate A (cm)	Time through photogate A (s)	Distance traveled by the car (cm)	Speed of the car (cm/s)
		1.00	
		1.00	
		1.00	
		1.00	
		1.00	
		1.00	

Section 6: Analyzing The Data

a)

b) On Your Graph

c)

d)

e)

Section 7: Using your Graph

Table 2: Predicted Speed Data

Selected Position (cm)	Predicted speed at selected position (cm/s)	Actual speed at selected position (cm/s)	Percent correct of prediction

Section 8: Calculating Percent Error

a)

b)

c)

d)