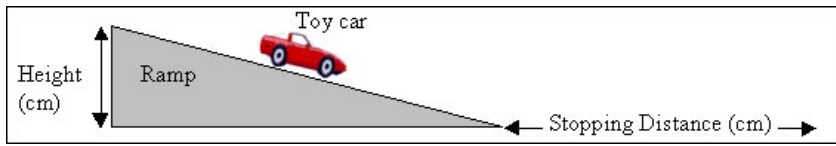


# Stopping distances of toy cars

Jane has been investigating the stopping distance of a toy car. She set up the equipment below and measured the stopping distance for a range of heights of the ramp.



These were her results:

Height of Ramp (cm)	Stopping Distance (cm)			Average (cm)
	1 <sup>st</sup> Try	2 <sup>nd</sup> Try	3 <sup>rd</sup> Try	
1	2.5	2.1	1.7	2.1
2	6.0	6.5	5.5	6.0
3	10.0	11.1	10.4	10.5
4	14.4	14.1	14.1	14.2
5	18.7	17.9	18.3	18.3

What was the aim of the experiment?

a) \_\_\_\_\_  
\_\_\_\_\_

What would be the best way to present these results, so students could see the pattern?

b) \_\_\_\_\_  
\_\_\_\_\_

The change in the height of the ramp affected the speed of the toy car. What is the energy change that has occurred in the toy car as it is let go to go down the slope?

c) \_\_\_\_\_ → \_\_\_\_\_

What other measurement would you need to record, to calculate the average speed of the toy car?

d) \_\_\_\_\_  
\_\_\_\_\_

Write a conclusion for this experiment.

e) \_\_\_\_\_

