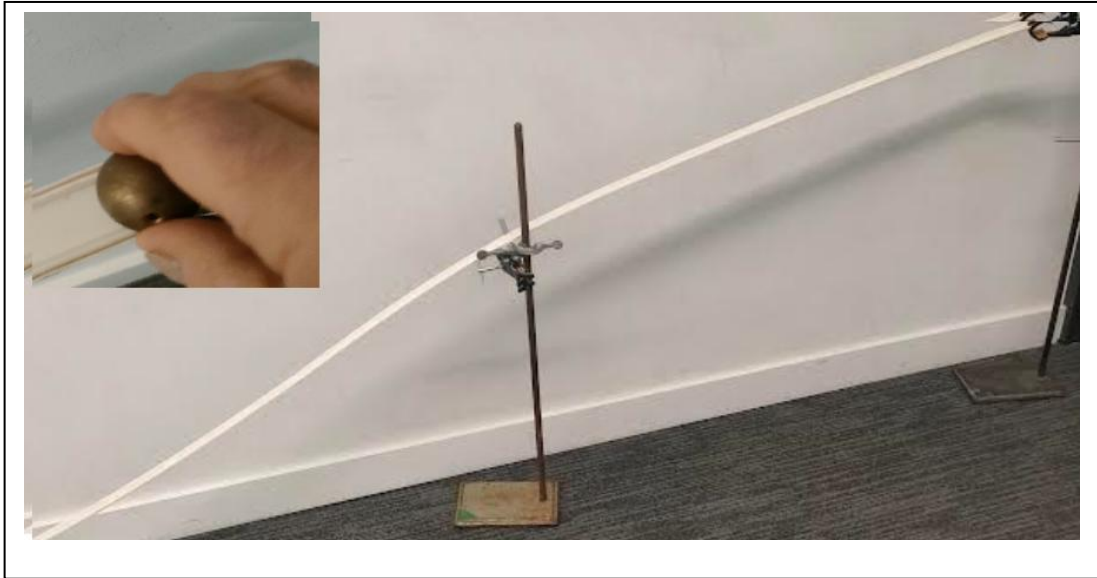


Height vs Speed

Transformation of energy



Material

- 3 m of plastic electrical gutter.
- Large ball bearing or marble
- Access to a carpeted area where the ball can roll off the track and onto the carpet.
- 20 m tape measure.



Figure 1 – electrical gutter.



Figure 2 - marbles

1. When conducting this investigation identify the following.

i. Independent variable

ii. Dependent variable

iii. Name four controlled variables

2. Identify one source of error that could have prevented the student from obtaining precise results in three trials conducted at each height. (Note: Precise results are those that are very consistent or close to each other.)

3. Describe the energy conversions taking place and identify the waste energy.

4. What four things must be present in a well formatted graph.

i. _____

ii. _____

iii. _____

iv. _____

Height the ball is released (cm)	Distance ball travels (m)
	Average -
	Average -
	Average -
	Average -
	Average -
	Average -

Graph the results in the table above on an appropriate set of axes. Use the graph paper on the next page.

