



PRIMARY YEAR 4 SCIENCE INVESTIGATION WRITING

Guidance notes:

In science lessons and assignments, you will occasionally be asked to write up results and conclusions from investigations you have carried out. This may sound straightforward, but there are things that you need to bear in mind to make your work as strong as it can be.

On the following page, you will find an example of a 'good' conclusion that has been written about a scientific investigation that explored the time taken for a toy car to travel down a ramp covered with a range of different materials.

Beside the text, you will find grey boxes to explain how the responses answer the questions in the titles.

Investigation:

How does the type of surface on a ramp affect the speed at which a toy car travels down it?

Results:

Material used on the ramp's surface	Paper	Tin foil	Fabric	Sandpaper	Crumpled newspaper
Time taken for the car to travel down the ramp (seconds)	2.7	2.6	3.1	3.1	3.9

When you carried out this investigation, what did you do to keep the test fair?

We can only change one variable to keep the test fair, so the only thing we changed was the surface of the ramp. All other variables, including the height of the ramp, the toy car we used and the person who released it stayed the same each time.

How well did your experiment go? What would you do differently next time to improve it further?

The results we got matched our prediction. We were also pleased with how accurately we carried out the investigation. We released the car from the same point on the ramp each time and stopped the timer as soon as it made contact with the floor. The only thing that caused a slight problem was a few creases in the tin foil that may have increased friction and slowed the car down – next time, we will make sure that the foil is completely flat and smooth.

When thinking about fair tests, it is always important to consider and use the term 'variable' in your response. Did you make sure that you changed only one?

How carefully did you control the variables in your investigation? What did you do to keep them (other than the one you were investigating) the same?

Were your results as you predicted? If not, why might that have been? Were there any problems you encountered?