

Purpose:

The purpose of this experiment is to test which angle of a downhill ramp would make a toy car travel the furthest.

Hypothesis:

If we test the distance a toy car travels depending on the angle of a downhill 85cm ramp, then a 45° will make the car travel the furthest distance, because the car will travel as smooth as a 30° angle but will also have a good amount of force pushing it forward.

Variables:

Independent variable:

The angle/height of the ramp.

Dependant variable:

The distance the car travels after being released at the top of a downhill ramp.

Control variables:

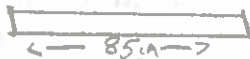
The same toy car must be used in each test, the ramp must be the same length (85cm), The surface the car is released on (rough or smooth), The right end of the ramp must be on the ground (not in the air), Wind speed.

Materials:

1 protractor (to measure angle)



1 85 cm ramp



A metre stick (to measure distance)

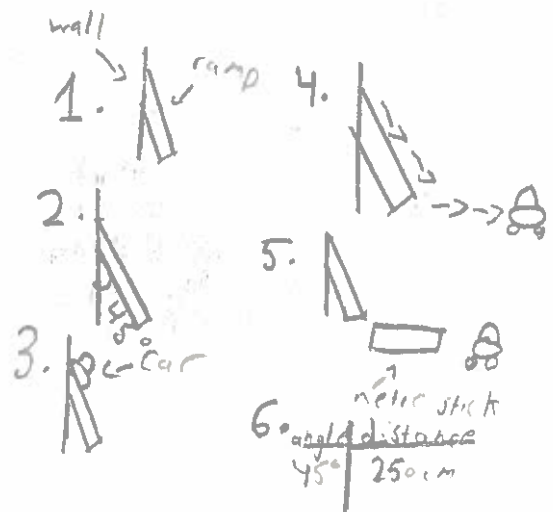


1 toy car



Procedure:

1. Position the ramp against the wall
2. Measure the angle of the ramp
3. Place the car at the top of the ramp
4. Wait for the car to stop moving
5. Measure the distance the car traveled
6. Write your results
7. Repeat until you have 4-5 results



angle	distance
45°	250cm
90°	N/A
52°	160cm
60°	180cm
15°	130cm