

Vroom! Vroom!

M1-8 ENGINEERING

Question

Can the uses of a toy car affect the distance gone down a ramp?

Abstract

My science fair project was testing how if the uses of wheels of a car affects distance gone down a ramp. This would be crucial to show anyone using wheels on anything such as a skateboarder it will show them to use an old or new one. My problem was getting a hot wheel car to roll the maximum distance after going down a ramp. My hypothesis was is If you use a car more than the other then the used one will go farther because there will be less friction in between the axle and the axle holder. I went about my experiment by getting a 30 degree angle. I then rolled one car down the ramp 50 times before recording distance. This would simulate it being used. I also ran it down my driveway to get the wheels used. Then I rolled the car down the ramp and measured distance. I found that the used car went far on every trial except one. This caused me to conclude that a used wheel is better to used than a new one.

Hypothesis

If you use a car more than the other then the used one will go farther because there will be less friction in between the axle and the axle holder.

Procedure

1. Release car A down ramp
2. Repeat 50 times
3. Release car A down ramp
4. Grab Tape Measure
5. Measure From bottom of ramp to car's current position
6. Record
7. Release car B down ramp
8. Grab Tape Measure
9. Measure From bottom of ramp to car's current position
10. Repeat 20 times
11. Analyze data

Materials

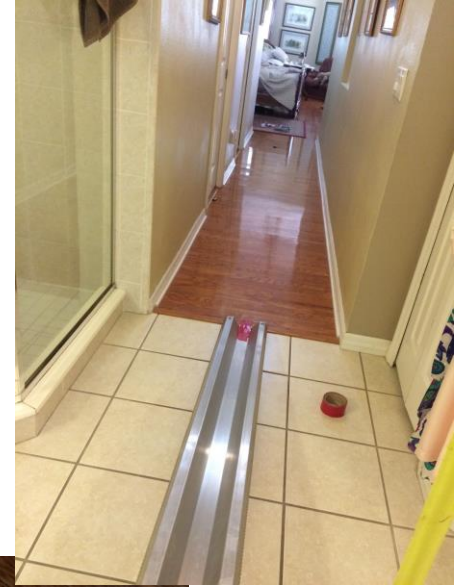
2 Toy cars that are identical

1 ramp

A staircase to use ramp

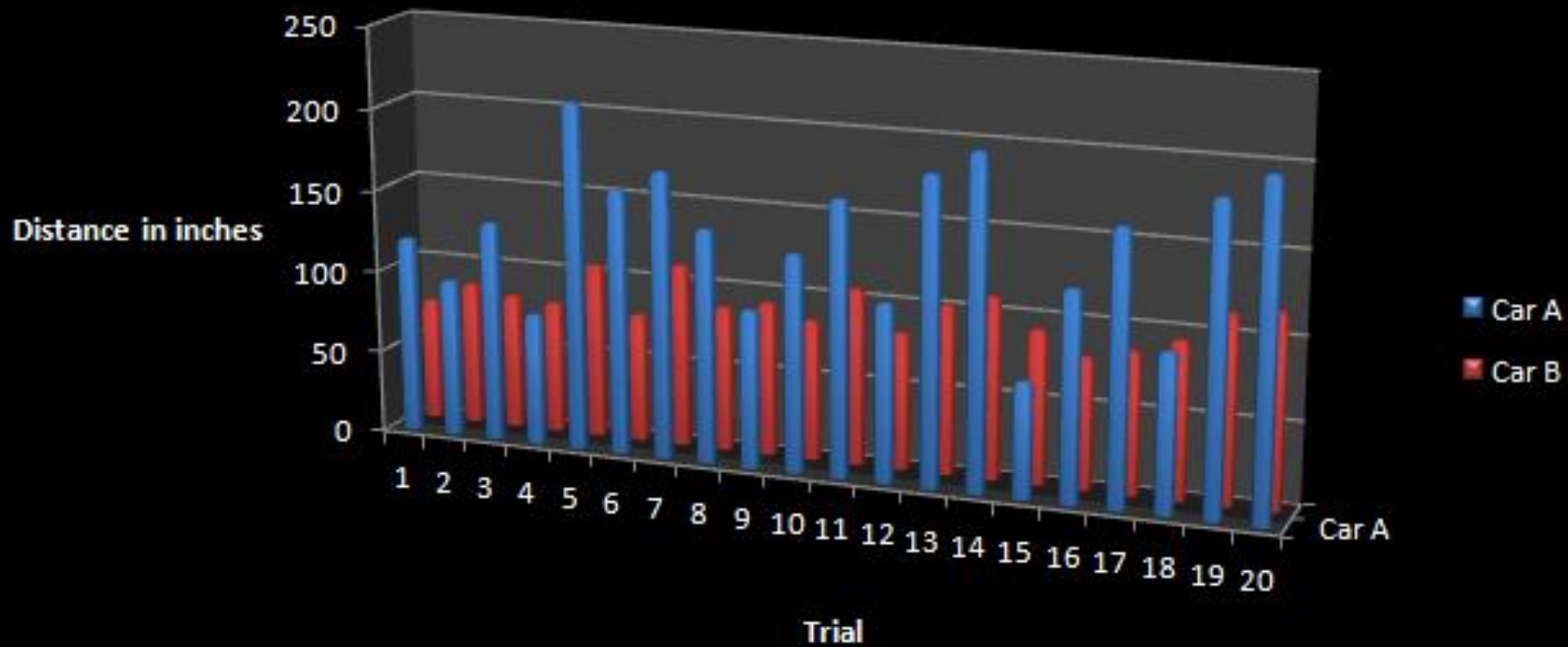
A tape measure

Experiment



Results and data

	A	B
4	80	80
5	211	106
6	161	78
7	174	111
8	142	88
9	96	93
10	132	85
11	167	107
12	108	83
13	186	102
14	201	110
15	70	93
16	127	80
17	165	86
18	96	95
19	186	114
20	201	117



Conclusion

I concluded that a used car is far better than a new car. This is true because a used car has friction on the wheel that helps the car stay straight.

Works cited

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