

Science Fair (Basketball)

M3-7 PHYSICS

Testable question

- ▶ Will any platform affect how high a basketball bounces?

Abstract

At the beginning of my experiment I went outside and took out a basketball. I tested my experiment every other day and I repeated my experiment many times. During my experiment I noticed when I bounced the basketball on grass it did much better than what I predicted it would do. After I looked at all my results I noticed grass didn't do that bad and did really good.

Hypothesis

- ▶ My hypothesis is, if a basketball bounces better on laminate, then professional players will bounce on laminate, because it will be more efficient and better for them.

Materials

1. Basketball
2. Air pump
3. Concrete
4. Laminate
5. Tile
6. Grass
7. Carpet(outdoor carpet)

Procedure's

1. Bring basketball outside
2. Go to the desired platform
3. Put the basketball next to your waist
4. Drop
5. Then put the basketball next to your chin
6. Drop
7. Gather data
8. Do the same thing for every platform

Variable's

- ▶ Independent Variable: The basketball
- ▶ Dependent Variable: The surface(s)
- ▶ Constant: Bouncing

Pictures

▶ No pictures

Results(graph)

Grass	Carpet	Wood	Concrete	Sand
1 foot high	2 feet high	1.3 feet high	3 feet high	2 feet high
1 foot high	1.8 feet high	1.5 feet high	3.4 feet high	1.3 feet high
1 foot and 2 inches	2 feet high	1.3 feet high	3 feet high	2 feet high
1 foot high	2 feet high	1.4 feet high	2.8 feet high	2.2 feet high
1 foot high	1.7 feet high	1.5 feet high	3 feet high	2.7 feet high

Results

- ▶ After finishing everything I noticed some did better than I thought. Concrete did the best out of every platform and sand got second best out of every at form. My hypothesis was correct and everything went well.

Conclusion

- ▶ In conclusion everything went well, concrete got the best data and was the best platform, which made my hypothesis correct.

Sites noted

- ▶ Haefner, Dennis. "Site Search." About Breakthrough Basketball, LLC. Joe Haefner, 8 Mar. 2009. Web. 29 Sept. 2016
- ▶ http://www.sciencebuddies.org/science-fair-projects/project_ideas/Sports_p037.shtml