

Purpose

Have you ever wanted to play catch with someone but there was no one to play catch with? Or maybe you wanted to practice your throwing skills but, again, there was no one to do it with? There might be a way to do it by yourself. The purpose of this project is to test which material a softball bounces off of best. You might need this information because if you want to practice throwing or playing catch by yourself, you can throw it against the material a softball bounces off of best and it'll come right back to you without you having to chase it (depending on how far away you are from the material.) This information will help all softball players wanting to practice throwing by themselves.

Hypothesis

If a ball is dropped on wood, concrete, steel, plastic and rubber, then the ball will bounce the highest when dropped on concrete.

Materials

1. Wood
2. Steel
3. Fiberglass
4. Rubber
5. Concrete
6. 11" Softball
7. Measuring Tape
8. Cell Phone
9. Tripod
10. Notebook
11. Pencil

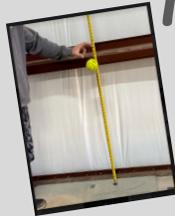


Softball Buddies

What Material Does A Softball Bounce Off Of The Highest?

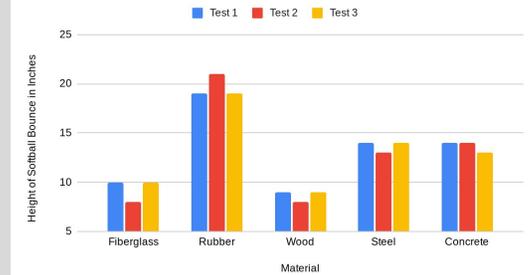
Procedures

1. Place material on ground
2. Set up cell phone on tripod
3. Put tape measure against wall
4. Drop softball on each separate material
5. Record a document for each measurement
6. Drop the ball at 42 inches and do three tests each on each material (separately)
7. Make sure to record measurements that you get from the measuring tape.
8. Make conclusions
9. Write Reports



Results

What Material Does a Softball Bounce Off of the Highest



Limitations

During this experiment, I had a couple of limitations. For starters, I was supposed to drop the softball at 42in. Every single test I took. Of course, I made human errors and didn't drop it at the same exact spot every single time. Another limitation is that some materials were high up off of the ground and might not have gotten an exact measurement because of how high up it was. The last limitation was that I didn't have a sturdy stand. I was supposed to use a tripod but we didn't have one and to order one it took a lot of time and money. So the camera footage was a little blurry which also might have caused me to get inaccurate results. Because of this, there might be some slight differences in the measure outcomes.

Conclusion

This experiment showed that when a ball is bounced on all kinds of different materials, it will bounce the highest when dropped on rubber/tire. three tests on each material were completed by dropping the ball at 42 inches every time a material was tested. The data did change sometimes, but the numbers ranged in the same area. Sometimes the ball would take a bad bounce and that would change the data. The hypothesis was incorrect because the ball did not bounce the highest on concrete, it bounced the highest on rubber. If this experiment were to be redone, there would be an attempt to get different materials. There would also be more tests on each material.

