Abstract Project Title: Bounce Off! Project ID:157

Abstract

A brief explanation of your project. Enables judges to receive a base understanding of your project and work.

The reason this project was chosen was because it was discovered while playing soccer that the ball bounces differently on the many different surfaces that it is played on. Some of these surfaces were tested, such as residential carpet, commercial carpet, grass, and sidewalk. The hypothesis was that on harder surfaces, the ball would bounce higher. This is because on softer surfaces, the kinetic energy from the ball was absorbed by the yarns and different blades of grass, whereas on harder surfaces the kinetic energy is harder to absorb, resulting in the ball bouncing higher.

Items to Include:

Introduction: Why did you do this project and why is it important? How will this effect people and why is it needed. Inspire the reader to continue learning more about your research and read your report.

Problem Statement and Engineering Goal / Hypothesis: What is the problem you were solving and what was your engineering goal or hypothesis.

Procedures: How did you solve the problem and or test your hypothesis. Don't go into details, provide a broad, conceptual view of what you did. For engineering, what was your design criteria.

Results: What was the outcome? Use your data and numbers to describe your result. **Conclusion:** Was your hypothesis supported or the engineering goal met?