



Curiosity Guide #304

Football Science

Accompanies Curious Crew, Season 3, Episode 4 (#304)

Football Bounce

Investigation #1

Description

Can you and your friends predict where a ball will bounce?

Materials

- Football
- Soccer ball
- Notecards or sticky notes
- Markers
- Some friends

Procedure

- 1) Write each person's name on 2 sticky notes.
- 2) Have each friend predict where the two balls will bounce the second time when the balls are dropped on the floor.
- 3) Place the notes on the floor to match the predictions for each of the balls.
- 4) Have your friends explain why they made the prediction they did.
- 5) Drop the soccer ball first.
- 6) Were the predictions close?
- 7) Then drop the football.
- 8) What happened?
- 9) Why is the football harder to predict?

My Results

Explanation

The football's shape, which is a prolate spheroid, makes predicting the football's second bounce more difficult. How the football lands and impacts the ground alters its direction, which makes the game more interesting to watch and can be the cause of many turnovers.

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