SODA CAN JUMP

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SODA CAN JUMP

The Soda Can Jump introduces the power of air pressure and Bernoulli’s principle

Air pressure is one of our favorite invisible forces, especially when Bernoulli’s Principle is involved. The Soda Can Jump utilizes this awesome principle to launch an empty soda can out of a coffee mug. It’s a hands-on experience in physics that you won’t want to miss.

Materials
• Empty soda can
• 2 Coffee mugs

EXPERIMENT
1. Open the soda and drink it.
2. Place one mug in front of the other.
3. Place the empty soda can in one of the mugs.
4. Blow air between the soda can and mug to make it “jump” into the empty mug. Adjust the distances between the mugs if necessary.
How Does It Work?
What causes the drastic “launch” of the empty soda can from one mug to the other? It’s the invisible force that we reference so often: air pressure!

Blowing air in between the can and the first coffee mug creates an area of high pressure between the bottom of the can and the inside of the coffee mug. The harder you blow, the more rapidly the air pressure between the surfaces increases. As the pressure between the surfaces raises, the pressure above the can stays the same, creating a bigger difference in pressure. This difference of pressure pushes the empty can up and out, like a jump!
HERE IS WHAT YOU NEED

1 CAN OF SODA
2 MUGS
1. Open the soda and drink it.
2 PLACE ONE MUG IN FRONT OF THE OTHER
PLACE THE EMPTY SODA CAN IN ONE OF THE MUGS
BLOW AIR IN BETWEEN THE SODA CAN AND MUG TO MAKE IT "JUMP" INTO THE EMPTY MUG
TRY ADJUSTING THE DISTANCE BETWEEN THE MUGS IF NECESSARY
IT MAY TAKE SOME PRACTICE