SAY HELLO TO STATIC ELECTRICITY

Learn how electrons attract protons to get objects moving.

Rubbing a balloon on your hair, a towel, a T-shirt or carpet transfers electrons from that surface to the balloon and creates a buildup of static charge. The electrons (negative charge) on the balloon attract the protons (positive charge) of the metal soda can, causing the can to roll toward the balloon.

MATERIALS

- Empty soda can
- Inflated balloon
- Your hair, towel, T-shirt or carpet

METHOD

1. Put the soda can on its side on a flat, smooth surface and hold with a finger until it stays still.
2. Rub balloon back and forth on hair, towel, T-shirt or carpet really fast.
3. Hold balloon an inch in front of the can and watch the can start rolling. Move balloon to the other side of the can and watch it roll in the other direction.
4. Document how fast and far the can rolls.

LEARN MORE

Race other students to see who can best control the static electricity.

What other materials are influenced by a static charge on a balloon? Hint: hold charged balloon near your hair, a trickling faucet or a wall.

You may have noticed your clothes stick together in the dryer and make sparks when you pull them apart. How do dryer sheets reduce static electricity?

What careers rely on an understanding of electricity? (e.g., electronics designers, electrical engineers, electricians, transmission line crew members)

NOTES

BURNS McDONNELL℠