

ROLL A CAN WITH STATIC ELECTRICITY



You will need:

- * An empty soda can
- * blown-up balloon
- * A head of hair

What to do:

1. Place the can on its side on a flat smooth surface like a table or a smooth floor.
2. Rub the blown-up balloon back and forth through your hair really fast.
3. Now the fun part – Hold the balloon close to the can without actually touching the can. The can will start to roll towards the balloon without you even touching it!

Try this too: While you've got the balloon out, tear up part of a tissue into tiny pieces about 1/4 inch (.5 cm) big. Rub the balloon in your hair again and bring it close to the tissue pieces. They will be attracted to the balloon and then jump away.

How does it work?

This works a lot like our bending water experiment. When you rub the balloon through your hair, invisible electrons (with a negative charge) build up on the surface of the balloon. This is called static electricity, which means “non-moving electricity” The electrons have the power to pull very light objects (with a positive charge) toward them – like the soda can.

MAKE IT AN EXPERIMENT

The project above is a DEMONSTRATION.

To make it a true experiment, you can try to answer these questions:

1. Does the size of the balloon change the power of the pull?
2. Does the length of the person's hair affect the power of the static electricity?
3. How much water can you put in the can until the balloon can't pull it anymore?