

Static Electricity

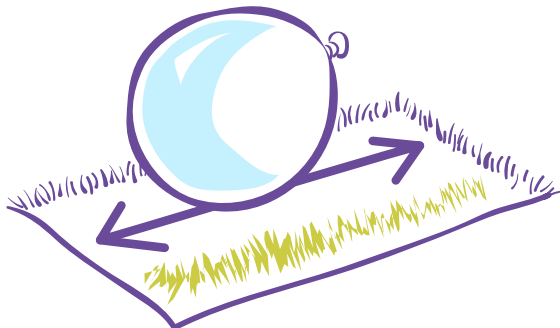
WHERE DO SPARKS COME FROM?

Electricity in which the electrons and ions do not move is called static electricity. You can create static electricity by rubbing two objects together, allowing electrons to switch from one object to another. Static electricity builds up and then leaps in a spark from one object to another.



TRY THIS

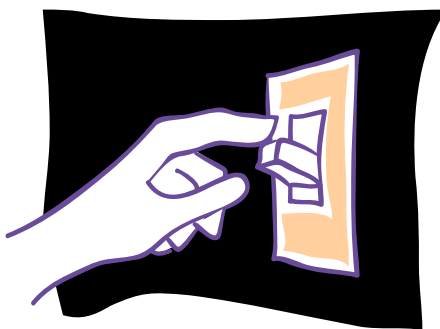
1. Rub the balloon on the wool, nylon or fur.



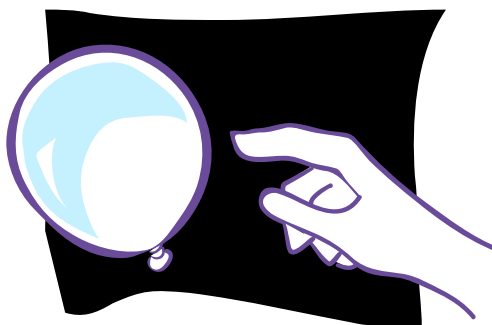
2. Touch the balloon to your hair. What happens? Why?



3. Darken the room and rub the balloon again.



4. Bring your finger near the balloon. What happens? Why?



THINGS YOU NEED

- Balloon
- Piece of wool, nylon or fur
- Room that can be darkened

POWER WORDS

Direct current. When an electric current flows in the same direction, it's called direct current. This is the kind of electricity batteries use to power a flashlight.

Alternating current. When the electric current moves in both directions, alternating or switching direction quickly, it's called alternating current. Alternating current is the kind used in homes and businesses all over the world.

WHAT DO YOU THINK?

What if you spray your hair with water before rubbing the balloon on it? Will it still spark?

(Hint: Water is a good conductor of electricity, which means it's easy for electricity to pass through it.)

Do you suppose static electricity sparks happen more often in the summer, when it's often humid, or in the winter, when the air is usually drier?