Hair-Raising Results
Grades 3 and up

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|  | All materials contain millions of tiny particles, called protons and electrons that have electric charges. Protons have positive charges, and electrons negative ones. Usually, they balance each other, but sometimes when two surfaces rub together, some of the electrons rub off one surface onto the other, and we can have static electricity. Materials with like charges (all positive or all negative) move away from each other; those with opposite charges attract each other. |  |
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Here are some great hands-on ways to learn about ***static electricity***.

**What You Need**

* A cool dry day
* 2 round balloons (inflated and tied)
* 2 20-inch pieces of string
* Wool or acrylic sock
* Mirror

**What to Do**

* Have your child tie a string to each inflated balloon. Then tell her to rub a balloon on her hair for about 15 seconds—help her to rub around the whole balloon. Have her take the balloon away and see what happens to her hair! Then have her observe what happens when she brings the balloon back close to her hair.
* Next, stand a few feet away from and facing your child. Have her rub the balloon on her hair again as you do the same with the other balloon. Tell her to hold the string to her balloon, letting it hang freely but without letting it touch anything. (You do the same with your balloon.) Slowly move the two balloons toward each other, but don't let them touch. Have your child tell you what's happening: Do the balloons push away from each other, or do they pull toward each other? Have her place her hand between the two hanging balloons. What happens?
* Give your child a sock to place over one hand. Tell her to rub her balloon with the sock, then let the balloon hang freely. Have her move her sock-covered hand near the balloon. What happens? Have her try rubbing both balloons with the sock and then letting them hang near each other. What happens now?