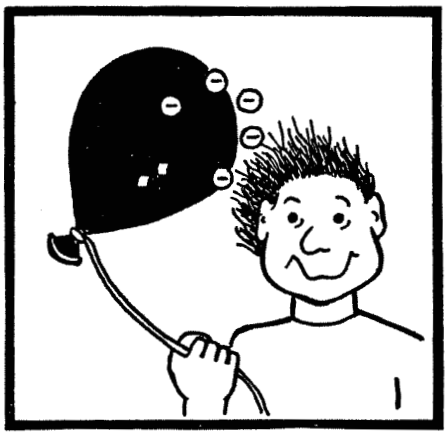
STATIC ELECTRICITY

1. How Does It Work?

When you rub your head with a balloon, the balloon will stick to the wall - why? The reason is that the friction made when two different objects are rubbed together creates static electricity. Three ways to tell if static electricity is present are:

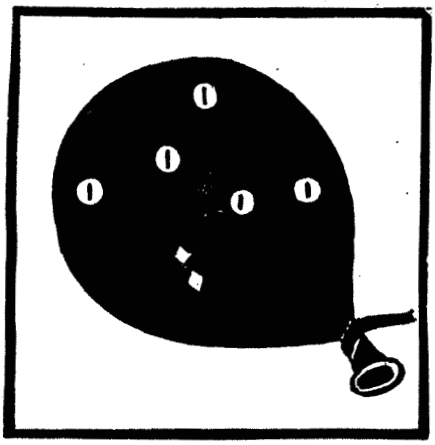
1) it sparks and can shock you
2) it makes a crackling sound
3) it causes things to stick together.

Step 1



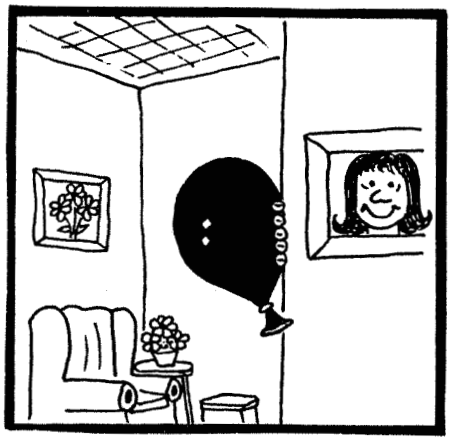
Rubbing causes the balloon to "steal" electrons from your hair.

Step 2



The balloon has a buildup of electrons so it has a negative charge. Your hair has lost electrons so it becomes positively charged.

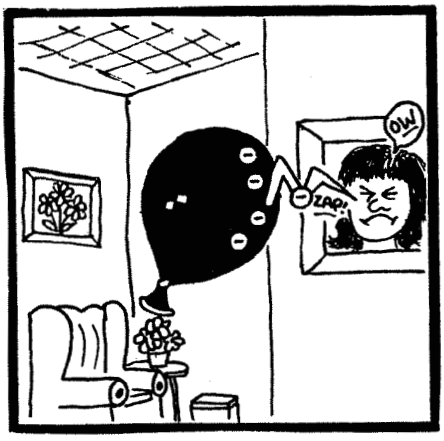
Step 3



Because opposites attract, the negatively charged balloon will stick to the wall

or

Step 4



If there are enough electrons on the balloon, they will try and "jump" to the wall and will make a small spark

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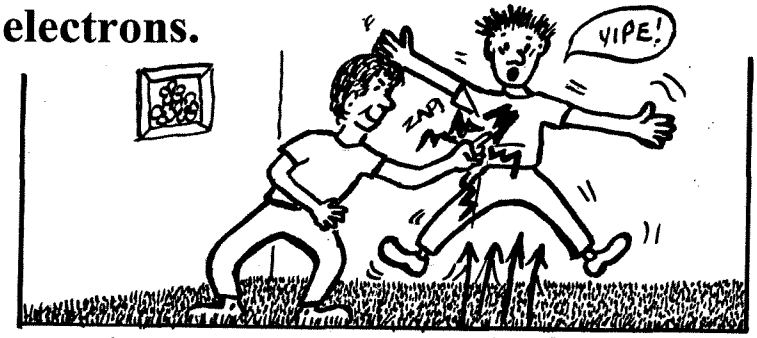
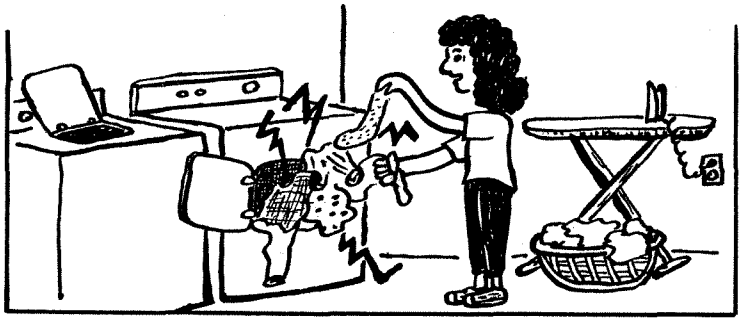
2. Where Does Static Electricity Occur?
Everyday examples include:

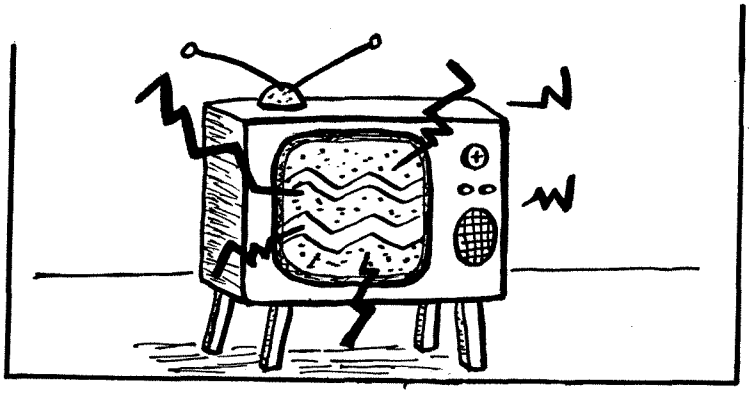
1) **dragging rubber-soled shoes can "steal" electrons from the carpet and you can usually shock someone with your buildup of electrons.**



2) **certain types of cloth rubbing together in the dryer will "steal" electrons causing clothes to stick together (static cling).**



3) **electrons collect on your TV screen and produce static electricity. (This why there is so much dust on most TV screens)**



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