

# Don't Give Me Static!



**QUESTION:** What creates static electricity?

**MATERIALS:**

balloon (inflated)  
dry cereal  
empty soda can  
metric ruler

plastic comb  
thread  
transparent tape  
wool cloth (or your hair)

**PROCEDURE:**

1. Tie a piece of dry cereal to one end of a piece of thread about 30 cm long.
2. Tape the other end of the string to the end of the metric ruler. Tape the ruler to the edge of the table or desk so that the cereal is not close to any object.
3. Wash and dry the comb thoroughly and dry it well.
4. Charge the comb by vigorously rubbing it with the wool cloth or running it several times through long, dry hair.
5. Slowly bring the comb near the cereal. It will swing to touch the comb. Hold the comb still until the cereal jumps away by itself.
6. Repeat Steps 3 and 4.
7. Now try to see how far you can pull the piece of cereal with the comb. Record this distance in the Data Section.
8. Repeat Step 7 two more times.
9. Now try to touch the comb to the cereal again. Record what happens.
10. Put the empty soda can on its side on any flat surface. Hold until it stays still.
11. Charge the balloon by vigorously rubbing it with the wool cloth or on your hair.
12. Hold the balloon about 3 cm in front of the can. The can will start to roll even though you are not touching it.
13. Move the balloon away from the can slowly. The can will follow.
14. Repeat Step 10 - 12 and see how far you can pull the can without touching it. Record this distance.
15. Repeat Step 15 two more times.

**DATA:**

TRIAL	CEREAL	CAN
1		
2		
3		
<b>Average</b>		

## ***PS – Activity #8***

### **QUESTIONS:**

1. What is an atom?
2. What are the three main parts of an atom?
3. Which part of the atom has a negative charge?
4. Which part of the atom has a positive charge?
5. What part of the atom is responsible for electricity?
6. Why do the comb and balloon attract the cereal or can?
7. What happens to cause the comb or balloon to lose their attractive properties?