

How Shocking!!!

1. The shock you get when shuffling your feet on carpet, is caused by a buildup of static electricity, which is discharged when you touch metal. **True or False? (Circle one.)**

Choose the word in Column B that best matches the description in Column A, and write the corresponding letter in the space provided.

Column A	Column B
2. _____ composed of atoms	a. proton
3. _____ a positively charged particle of the nucleus	b. neutron
4. _____ a negatively charged particle found outside the nucleus	c. matter
5. _____ a particle of the nucleus that has no charge	d. electron

6. Like charges attract and opposite charges repel. **True or False? (Circle one.)**
7. Which of the following determines the strength of a force between charged objects?
- the age of the charges
 - the size of the charges
 - the distance between the charges
 - Answers (b) and (c) are correct

Choose the word in Column B that best matches the definition in Column A, and write the corresponding letter in the space provided.

Column A	Column B
8. _____ "wiping" electrons off of one object onto another	a. induction
9. _____ transfer of electrons when one object touches another object	b. friction
10. _____ rearranging electrons in an uncharged object when it is near a charged object	c. conduction

11. Charges cannot be created or destroyed, they can only be transferred. **True or False? (Circle one.)**
12. A polarized object is electrically neutral. **True or False? (Circle one.)**
13. Electric cords are covered in plastic and have metal prongs. This is because metal is a good _____ and plastic is a good _____. (**insulator or conductor**)
14. Hair dryers should not be used near water, because tap water conducts charges very well, so if you accidentally drop the hair dryer in water, you might receive an electric shock from charges traveling through the water. **True or False? (Circle one.)**
15. As charges move off an object, the object loses its static electricity. This process is called electric _____. (**charging or discharge**)