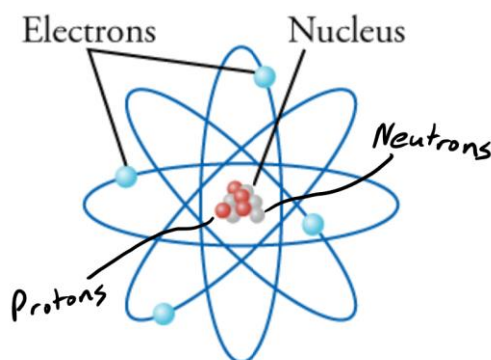


Unit 2: Electricity

Notes, part 1: Textbook Chapter 18.1 Electrical Charge, Conservation of Charge, Transfer of Charge

1. What are the two types of charges?
2. Like charges _____ and unlike charges _____.
3. In atoms, _____ carry negative charge and _____ carry positive charge.



4. The strengths of a proton's charge and an electron's charge are _____ (though they are opposite)
5. "Net charge" is what you get when you add up all of the positive and negative charges inside something. What is the "net charge" of an object with....
 - a. 3 protons
 - b. 4 electrons
 - c. 2 protons and 1 electron
 - d. 5 electrons and 3 protons
 - d. 7 protons and 7 electrons

6. When materials are rubbed together, charges can be separated, particularly if one material has a greater _____ than another.
7. Rabbit fur has a _____ affinity for electrons, while PVC has a _____ affinity for electrons.
8. Suppose we have a rabbit fur that has zero net charge, and we also have a PVC pipe that has zero net charge. What can we say about the number of protons and electrons in each object?
9. If we rub a PVC pipe with rabbit fur, what effects might we observe? Why?
10. During this experiment, what has happened to the total number of positive and negative charges (if we add up all the positive and negative charges on the two objects)? Has the total increased, decreased, or stayed the same. Explain.
11. Law of Conservation of Charge:
12. In the winter, people often talk about static electricity. What does the "static" part of "static electricity" mean? Why is it called "static electricity?"

