Chapter 9.1 Static Electricity

Remember that atoms have particles that have a positive
charge () and particles that have a negative charge
().
are stuck in the nucleus and are not able to freely
move about, however, are free to move about.
Perhaps you have experienced static electricity at some point in your life. Get a shock by touching a doorknob? Clothes out of the dryer seem "sticky"? Bad hair day?
The term "" refers to an electric charge at rest.
Some objects will hold a static charge for a long time. But
eventually the charge will "go away" or is
The study of static electricity is called
Perhaps you have heard of He conducted a very famous experiment involving electricity. He flew a kite during a thunderstorm with a key attached to the string. The key built up a static charge.
Franklin (and others!) help to develop the idea that there are 2
types of electric charge: and

Charged particles act very similar to: like charges
repel each other and opposite charges attract each other. This
concept is known as the Law of
are electrically charged atoms (\odot) Electron transfer is what makes an ion. Extra electrons =, too few electrons =
We now know it is the that "make up" electricity. One error with Franklin's theory is that he thought the
particles were what moved.
Just like with atoms, some substances tend to
electrons and some substances tend toelectrons.
Static electricity is a result of the of two objects. When this occurs, the object giving away electrons
becomes and the object taking on electrons
becomes
Interestingly enough, a charged object can make aobject seem like it has a charge. This is called an