**The Electrostatic Series, Conductors, Insulators, and Charge**

The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a list discovered through experimentation. It is ordered by the properties and likelihood to gain electrons.



Using the Electrostatic Series answer the following questions:

* When Wool and a Balloon are rubbed together the Wool gets a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** charge and the Balloon gets a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** charge.
* When a piece of Rubber is rubbed on your Hair the Rubber gets a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** charge and your Hair gets a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** charge.

**Insulators and Conductors**

What type of common material is missing from the Electrostatic Series?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ do not hold static charges very well because they are usually good \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a material that allows electrons to easily move. Metals usually have a couple electrons that are free for easy movement. If a metal were to \_\_\_\_\_\_\_\_\_\_\_ a charge, it would let the electrons move so the charge is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ evenly along the whole piece. It would also let the charge travel into anything it may be \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Materials that hold static charges very well are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are materials that do not allow electrons to move within them easily. This means, if one end of an insulating material (like \_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_) was charged, the charge would stay at that end of the material.

**Measuring Charge**

The unit we use to measure charge is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. It takes about \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ electrons to make 1C of charge.