

Name: _____

Date: _____

Physics lab
Electrostatics

When different objects are rubbed on various materials there is a transfer of electrons. The problem is which way do the electrons go? When you rub fur on a plastic rod, electrons come off the fur and on to the rod making the rod negatively charged. Using this information and an electroscope, determine the transfer of electrons for various materials. You must use at least three different "rods" and four different materials.

The following are points to consider:

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Hypothesis: does the rod or material determine the electron transfer? _____

Fill in data table on the back.

Questions to answer

1. When you initially touch the negative rod to the electroscope what gets transferred to the electroscope?

2. When you bring the negatively charged rod near a negatively charged electroscope do the leaves converge or diverge?

3. When you bring the positively charged rod near a negatively charged electroscope do the leaves converge or diverge?

4. If a rod is negatively charged, what is transferred? (specify what is gained or lost by the material and rod)

5. If a rod is positively charged, what is transferred (specify what is gained or lost by the material and rod)

Hand write or type your conclusion needs to be a paragraph in length and you may incorporate the questions above. Please summarize your findings in your conclusion.

Rod material	fur	wool		
Plastic	—			
glass				

The sign
is the
charge on
the rod