Electric Scenarios

In groups of *three,* get a computer (yours or the schools) and have a group member email me to request a Padlet. On the Padlet, you can double click to add notes. Notes can be images, urls, or text.  
  
Evaluate the scenarios below for the criteria listed, and create a Note on the Padlet to record your answers. Make one Note for each scenario. You may upload images or link to urls that you also deem helpful.   
  
Your goal is to explain the phenomena that is described using our new understanding of electric charge as completely as possible.

Criteria for Evaluation:

Your explanation should contain the following:

* The charges (if they can be determined) of all objects in the scenario
* Any transferring of electrons
* If something was charged, the method of charging that occurred (Induction, Conduction, or Friction)

Situations:

1. A glass rod is rubbed against a sample of animal fur, and then touched to an electroscope. The legs of the electroscope spread apart.
2. A negative sphere is brought close to a neutral soda can. Positively charged scraps of paper are attracted to the opposite side of the soda can.
3. A negative sphere is brought close to a grounded soda can. While the negative sphere is close to the car, the grounding wire is cut. The negative sphere is removed. A neutral balloon is attracted to the soda can.
4. On a dry day, a student rubs a balloon on their hair and tosses it up to the ceiling. It sticks to the ceiling.
5. On a humid day, a student rubs a balloon on their hair and tosses it up to the ceiling. This time, it does not stick.
6. A negatively charged conducting rod is touched to a neutral sphere. A passing student gets a shock when they then touch the sphere.
7. A neutral conducting rod is rubbed against animal fur. The rod is then touched to a conducting sphere. The sphere is brought next to a second, neutral sphere. A neutral balloon sticks to the far side of the second sphere.