

Part B: Charging by Grounding (Induction)

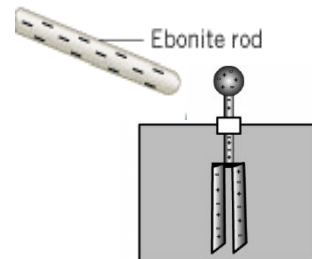
Question: Can an object still have a charge even after is has been grounded?

Hypothesis: _____

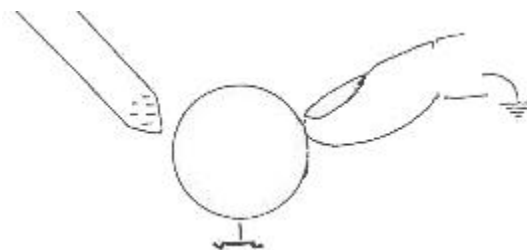
Materials: Ebonite rod fur electroscope Glass rod

Procedure:

1. **Without touching** the uncharged metal-leaf electroscope, approach it with a **charged ebonite rod** .
 - a. **Record observations**
2. Touch the top of the electroscope to ground it.
3. Repeat step 1 with a **charged glass rod**.



4. Charge the electroscope with the **ebonite rod**.
5. Bring the ebonite rod **CLOSE TO, BUT NOT TOUCHING** the electroscope. **QUICKLY** touch the ball.
6. Move the ebonite **rod away**.
 - a. **Record observations**
7. Predict the type of charge that was induced on the electroscope. Test your prediction using the **charged glass rod**.
8. Repeat steps 4-7 with a **charged glass rod**.



Observations:

Objects	Close to electroscope	After charging electroscope	After QUICKLY touching electroscope	After moving charged rod away
Ebonite				
Glass				

Questions:

1. What happens when you move the charged rod away after grounding the electroscope?
2. Why do you think this happens?