

Electrostatics Lab

Procedure

Make a chart with Quantity Measured/Symbol for Measurement/Instrument Used. Briefly, but completely, describe the procedure for this lab – and include a labeled sketch.

Questions

Make sure to use quantifiable evidence and appropriate terminology to answer the following questions. Your sketch needs to be detailed and aesthetically pleasing.

- 1) Sketch the graph from Part 1 of your lab, with correct scale, labels and units. Account for the shape of the graph by explaining the transfer of charge between the white and black wands, and the pail as each wand is placed within.
- 2) Sketch the graph from Part 2 of your lab, with correct scale, labels and units. Account for the shape of the graph by explaining the transfer of charge between the wand and the pail.
- 3) Sketch the graph from Part 3 of your lab, with correct scale, labels and units. Account for the shape of the graph by explaining the transfer of charge between the wand and the pail.
- 4) Sketch the graph from Part 4 of your lab, with correct scale, labels and units. Account for the shape of the graph by explaining the transfer of charge between the wand, the pail, and the ground.
- 5) Sketch the graph from Part 5 of your lab, with correct scale, labels and units. Account for the shape of the graph by explaining the transfer of charge between the wand, the pail, and the ground.
- 6) How well, or poorly, do these results agree with the Law of Conservation of Charge?

Error Analysis

Thoroughly explain what the main sources of error are for this lab, and how you would correct them.



"I told you nylon carpets were a mistake."