

Name: _____

Class Period: _____

Physics: Electrostatics
Calculating Charge Homework

Conceptual Questions

1. Why is it that the electrons are the particles that move from one object to another?
2. What does it mean that charge is quantized? Why must this be so?

Mathematical Questions:

3. How many protons are in 1.00 C of charge?
4. An object has an excess of 4.55×10^{15} electrons. What is the charge of this object?
5. An object has an overall, net charge of $+ 7.5 \times 10^{-6}$ C. If this object contains 5.5×10^{14} protons, how many electrons must the object have?
6. Calculate the net charge on a substance consisting of a combination of 7.0×10^{13} protons and 3.0×10^{13} electrons.