

Circle Recitation Time: W1:30 W2:30 H8:30 H9:30 H10:30 H12:30 H1:30 H2:30

Physics 151 Worksheet #13: Electrostatics & Electricity

Name: _____

Partner(s): _____

Directions : Complete the following questions based on the computer simulations. Please show all of your work and explain all of your reasoning. Place boxes around your final answers.

Simulation #1: Charges and the Coulomb Force

Experiment with the positions of the charges and the resulting net forces. What can you determine about their values of charge? What can't you determine? Fully explain your reasoning.

Simulation #2: The Pendulum & Coulomb's Force

Determine the charge on each sphere. You should draw a free-body diagram of the forces on a mass when it reaches equilibrium and fully illustrate the relevant calculations.

Answer =	
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Simulation #3: Ohm's Law

Determine which elements obey Ohm's law. Fully explain your reasoning.

Answer =	
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