PHY 100 - Assignment #17

Pre-Lecture Reading
Please prepare the following before lecture. Check-off the boxes as you go …

- Read Chapter 20 → Introduction
- Read Chapter 20 → Section: Electrical Properties
- Read Chapter 20 → Section: Two Kinds of Charge
- Read Chapter 20 → Section: Electric Force
- Read Chapter 20 → Section: Electricity and Gravity

Test your understanding with these reading questions:

- What is the difference between an insulator and a conductor?
- Why are you more likely to get shocked by a door knob in the winter?
- What are the two kinds of charge?
- What is the force between like charges? What is the force between opposite charges?
- What is Coulomb’s law? What would you use it for?
- What is the units for charge?
- Is Coulomb’s law an inverse-square relationship?
- What are some of the important differences between the force due to electricity and the force due to gravity?
- What are the different roles these forces play in our lives? Which one dominates the atomic world and which one dominates the world of people, planets, and galaxies?

*** Don’t forget to work on the assigned problem set. ***