Learning Activities

1. Students will compete a set of review problems covering Newton’s Universal Law of Gravitation for objects with small masses.
2. Given data, students will use a graph or mathematical model to determine the relationship that exists between the electrostatic force and the magnitude or size of the charges involved.
3. Given data, students will use a graphs or mathematical models to determine the relationship that exists between the separation distance and the electrostatic force that exists between separated point charges.
4. Students will watch a screencast demonstrating the calculations of electrostatic forces, and will solve problems involving two point charges.
5. In class, students will solve problems containing two point charges separated in space. They will diagram their solutions showing the net gravitational and electrostatic forces involved in each situation and will submit one problem of their choosing to demonstrate mastery.