Science Standards for “Electrostatics and Space”

NGSS- Next Generation Science Standards CCSS- Common Core State Standards

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| NGSS |  |
| PS2-1 | [**Motion and Stability: Forces and Interactions**](https://www.nextgenscience.org/pe/3-ps2-1-motion-and-stability-forces-and-interactions)  Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. |
| PS2-3 | [**Motion and Stability: Forces and Interactions**](https://www.nextgenscience.org/pe/3-ps2-2-motion-and-stability-forces-and-interactions)  Make observations and/or measurements of an object’s motion to provide evidence that a pattern can be used to predict future motion. |
| PS1-4 | **Structure and Properties of Matter**  Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when temperature is removed. |
| PS2-3,5 | **Forces and Interactions**  Ask questions about date to determine the factors that affect the strength of electric and magnetic forces. |
| PS-4 | **Waves and Electromagnetic Radiation**  Develop and use a model to show that waves are reflected, transmitted, or absorbed through various materials |
| MS-ESS1-3 | **Space Systems**  Analyze and interpret data to determine scale properties of objects in the solar system |
| PS3-1 | [**Motion and Stability: Forces and Interactions**](https://www.nextgenscience.org/pe/hs-ps2-3-motion-and-stability-forces-and-interactions)  Apply scientific and engineering ideas to design, evaluate, and refine a device that minimizes the force on a macroscopic object during a collision. |
| [PS2-1](https://www.nextgenscience.org/pe/hs-ps2-1-motion-and-stability-forces-and-interactions) | [**Motion and Stability: Forces and Interactions**](https://www.nextgenscience.org/pe/hs-ps2-1-motion-and-stability-forces-and-interactions)  Analyze data to support the claim that Newton’s second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration. |
| CCSS | **Operations and Algebraic Thinking** |
|  | **Measurement and Data** |