



## Unit 4 Electric, Magnetic, and Gravitational Forces

### Grade 6 Science

#### Unit Description:

Students will continue their progress of interpreting graphs based on kinetic energy relationships. They will then connect their previous learning to new learning of Newton's Third Law of Motion. Students will also provide evidence that a change in an object's motion depends on the sum of the forces and mass of the object.

#### Science Standards:

- 6-MS-PS2-3** Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- 6-MS-PS2-4** Construct and present arguments using evidence to support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.
- 6-MS-PS2-5** Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact.

#### Enduring Understandings- Unit Anchor Phenomenon:

Cow and deer herds tend to point their bodies in a north-south line.

#### Essential Questions- Reflective Summaries:

- Make and support the claim that gravitational interactions are attractive and depend on the masses of interacting objects.
- Plan and conduct an experiment to provide evidence that fields exist between cow and deer herds and that they exert forces on the herds even though they are not in contact with them.
- What factors affect the strength of electric and magnetic forces acting on cow and deer herds?