

LINCOLN PUBLIC SCHOOLS
Science Learning Expectations: Grade 6

Strand:

Earth Science

**Mass Standard
ESS10**

Students will compare and contrast properties and conditions of objects in the solar system (i.e., sun, planets, and moons) to those on Earth (i.e., gravitational force, distance from the sun, speed, movement, temperature, and atmospheric conditions).

See also: ESS8, ESS9, ESS11, ESS12, and inquiry standards

Big Ideas

- ❑ Gravity is the force that governs the organization and movement of all objects in the universe.
- ❑ The Earth and celestial phenomena can be described by principles of relative motion and perspective.

Key Outcomes

- ❑ Students will demonstrate an understanding that **gravity is a fundamental force that allows the regular and predictable motion of all known objects in the universe** by identifying and explaining celestial phenomena observable from Earth (i.e., phases of the moon, eclipses).

Essential Knowledge and Skills

Students will be able to:

- ❑ Moons orbit planets and planets orbit the sun. Gravity is the force that keeps them in orbit.
- ❑ Most objects in the solar system have a regular and predictable motion.
- ❑ Organize the components of the universe in order of increasing complexity.