

**Standard IV: Students will understand the relationships among energy, force, and motion.**

**Objective 2: Examine the force exerted on objects by gravity.**

- a. Distinguish between mass and weight.
- b. Cite examples of how Earth's gravitational force on an object depends upon the mass of the object.
- c. Describe how Earth's gravitational force on an object depends upon the distance of the object from Earth.
- d. Design and build structures to support a load.
- e. Engineer (design and build) a machine that uses gravity to accomplish a task.