**6th Grade Science Lesson**

**1. Lesson Topic/Title and Pacing**

* **Living Environment**
* **Standard: 5**
* **Key Idea: 5 – Energy and matter interact through forces that result in changes in motion.**
* **Performance Indicator: 5.1 – Describe different patterns in motion of objects.**
* **Major Understanding: 5.1d – Force is directly related to an object’s mass and acceleration. The greater the force, the greater the change in motion.**

**2. Performance Objectives**

* **Explain how mass and acceleration will increase the force of an object.**

**3. Vocabulary**

* **Newton’s second law of motion, force, acceleration, gravity, velocity, speed, kinetic energy, potential energy**

**4. Activity**

* **Solve simple problems using F = M x A**
* **Have students complete simple problems in order to determine which scenario would create the greatest force.**

**5. Assessment/Student Outcome**

* **Describe the effect of changing the mass on objects.**
* **Identify and define force, mass acceleration.**