**Chapter 2: The Laws of Motion**

**Vocabulary:**

Force Contact Force Noncontact Force Gravity Mass Weight

Friction Net Force Balanced Forces Unbalanced Forces Inertia

Newton’s 1st Law of Motion Newton’s Second Law of Motion Circular Motion

Centripetal Motion Newton’s Third Law of Motion Force Pair Momentum

Law of Conservation of Momentum

**Outline of Topics:**

1. Define and explain force.
* Balanced and unbalanced forces (force has direction)
* Contact and Noncontact force.
1. Forces that affect motion.
* Friction
1. Define
2. Types-sliding, static and fluid (air resistance)
3. Explain how each type of friction affects each type of motion.
* Gravity
1. Define
2. Explain how it affects each type of motion.
3. Explain how it affects weight.
4. Differentiate between mass and weight.
* Centripetal Force
1. Define
2. Explain how it affects the motion of an object.

 3. Newton’s three laws of motion.

* Explain
* Demonstrate

 4. Momentum

* Define momentum
* Calculate momentum
* Law of conservation of momentum