**Name:**

**Date:**

**School:**

**Facilitator:**

6.03 First Law Note-taking Guide

**Watch the video Newton’s 1st and 2nd Laws (linked on the Task page). Use what you learn to complete the following:**

**Newton’s First Law**

1. Newton’s 1st Law of Motion is also called the Law of      .
2. State Newton’s 1st Law of Motion:      .
	1. Objects at rest tend to      .
	2. Objects in motion tend to move in a             at constant      .

**Inertia**

1. Inertia is a       of matter that you can observe and measure.
2. It       changes in motion.
3. The best measure of an object’s inertia is its      .
4. The more       an object has, the more       it has and the more sluggish, or       to changes in its motion, it will be.

**Force**

1. A force is a       or a      .
2. Forces are      , so direction is important.
3. Only             cause the motion of an object to change.

**Examples**

1. Examples of Newton’s 1st Law in action:
	1.
	2.
	3.
	4.
2. Egg Demonstration
3. Why does the tray fly across the table?
4. Why do the cardboard cylinders go with it?
5. Why do the eggs drop straight down into the water?
6. Physics Challenge: Why doesn’t a car in motion on a flat road stay in motion?

**Acceleration**

1. Examples of Accelerated Motion:
2.
3.
4.
5.
6.
7.
8. Inertia resists      .
9. A       causes      .

**Newton’s Second Law**

Even though we only covered Newton’s First Law in this lesson, watch the last few minutes of the video to learn about Newton’s Second Law of Motion. This will prepare you for our next lesson.

1. Newton’s 2nd Law of Motion is also called the Law of      .
2. State Newton’s 2nd Law of Motion:      .
3. An object’s motion       in the       of the net force acting on it.