

Science Fusion  
Unit 15  
Study Guide

**Force-** a push or a pull

**Gravity-** a force of attraction between two objects, even if they are not touching

**Inertia-** the tendency of objects to resist a change in motion

**Unbalanced Forces-** a cause of a change in motion

**Friction-** a force that opposes motion and acts between two objects that are touching

**Mass-** the more mass an object has, the more force (Newtons) it takes to move the object.

Gravity causes a Spring Scale to move.

The more force an object exerts the faster it will go

When doing an experiment, repeat it as many times as possible and find the average.

Newton's 3<sup>rd</sup> Law- for every action there is an equal or opposite reaction

If a Force is applied and the object does not move, then the opposite force is equal

Objects with the least amount of mass will have the greatest motion when a force is applied

Newton's 1<sup>st</sup> Law- an object in motion will stay in motion, an object at rest will stay at rest unless a force acts upon it.

When a object is balanced, it is not moving, but when a force is added it become unbalanced and starts to move.