

Nicole Bintliff
A Brief History of Physics
Physics 201
December 5th, 2018

A Brief History of Physics

(Can use for publications on BoxSand.org with my name.)

Forces

A force is an interaction that can change the motion of an object. Aristotle was among the first to develop ideas about the physical world sometime during 384-322 BCE. He believed that objects have the natural tendency to fall down to the earth which he called gravity, or the natural tendency to rise to the sky which he called levity. He also stated that no motion is possible without a force acting on the object. A man named Sir Isaac Newton then studied the topic of mathematics and physics, working from previous research done by past influential scientists such as Galileo and Aristotle (William, S. A. (n.d.)). His studies included astronomy, optics, physics, and mathematics. With a focus on motion and objects behavior, he created his three laws of motion which he presented in 1686. When creating these laws Newton considered massive bodies to be mathematical points with no size or rotation. With this he was able to ignore factors such as friction, air resistance, temperature, etc. and focus more on things like the object's mass, length, and time. The first motion states that every object will remain at rest or in uniform motion in a straight line unless an external force acts upon it. His second law stated that force is equal to the mass of an object times its velocity. And the third law stated that for every action in nature there is an equal and opposite reaction. These three laws are now known as classical mechanics- the study of the motion of objects. These laws would then be used for centuries after his time up to present day to describe the objects we experience every day.

<https://www.grc.nasa.gov/www/k-12/airplane/newton.html> (with fun interactive activities)