

Newton's First Law of Motion

An object at rest tends to stay at rest and an object in motion tends to stay in motion with the same speed and in the same direction unless acted upon by an unbalanced force.

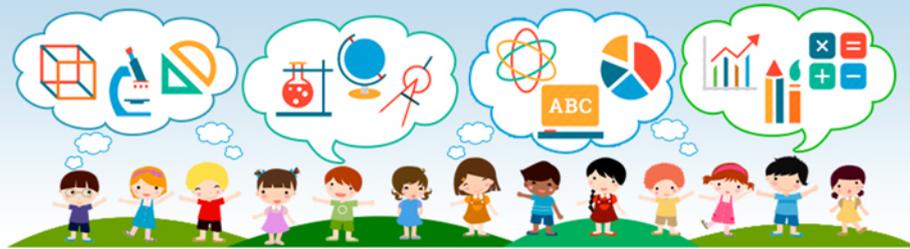
Meaning, if you place a book on your desk, it will remain at rest on your desk unless something (or someone) causes it to move.

Lesson Checkpoint: Describe Newton's First Law of Motion.

Newton's Second Law of Motion

The

If you
air a
with
the
would
more
great



he
nd
of
ss

PREVIEW

Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

Newton's Third Law of Motion

For every action there is an equal and opposite reaction.

Example of what this means:

When object A exerts a force onto object B, object B exerts a force of equal strength in the opposite direction on object A.



Lesson Checkpoint: Describe Newton's Third Law of Motion.

Newton's Law of Gravitation

Newton's Universal Law of Gravitation states that any two objects exert a gravitational force on each other. The strength of the gravitational force is dependent upon the mass of the objects. The larger the mass of the objects, the larger the force between the two objects. The strength of the gravitational force is also dependent upon the distance between the objects. The farther away the two objects are, the weaker the gravitational force is between them.

Gravity Facts:

If you drop an object, it will fall directly to the ground – because of gravity.

Planets orbit around the sun - because of gravity.

Wo
Wo
obje

Sim
Sim

The

A p
arou
pull
lowe

An

d



PREVIEW

Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

A **wheel and axle** consists of a bar that a wheel revolves around on or along with it.

A **lever** is a simple machine that is a board that can move on a fixed point, called a fulcrum, and can be used to move an object up or down.

A **wedge** is simple machine that is actually two inclined planes joined together back to back. Wedges are often used to split wood.

A **gear** is made of two wheels that have notches that fit together either directly or by a chain or belt which allows one wheel to turn the other wheel. Gears help clocks and bicycles move.

Lesson Checkpoint: What is one type of simple machine?