

WORD OF THE WEEK

15th October 2018

Inertia

Inertia (*noun*)

General Meaning

1) a tendency to do nothing or to remain unchanged.

2) Meaning In Science

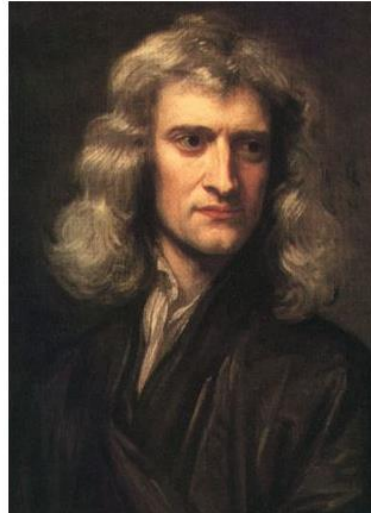
The resistance of a body to changes in its momentum. Because of inertia, a body remains at rest, and a body in motion continues moving in a straight line and at a constant speed, unless a force is applied to it. Mass can be considered a measure of a body's inertia.

Origin of the word Inertia

- From the Latin *iners* which means unskilled or inactive
- introduced as a term in physics 17c. by German astronomer and physician Johann Kepler (1571-1630)
- Used in 1687 by Newton, writing in Modern Latin.
- The classical Latin sense of "apathy, passiveness, inactivity" is acknowledged in English from 1822.

Inertia in Physics

In physics, the tendency for objects at rest to remain at rest, and for objects in uniform motion to continue in motion in a straight line, unless acted on by an outside force.



- English scientist and mathematician
- *Born:* Woolsthorpe, Lincolnshire, December 25, 1642 (Julian Calendar)
- *Died:* London, March 20, 1727

Sir Isaac Newton was a brilliant mathematician and scientist famous for calculating

The Laws of Motion. Sadly, according to many biographies he was also an intolerant, cruel and boastful man that encouraged hanging and disliked women!

Newton's Laws of Motion

▶ 1st Law – Law of Inertia

▶ 2nd Law – Force = Mass x Acceleration

▶ 3rd Law – Action-Reaction

Everything to do with motion, forces, gravity, speed, or acceleration is governed by these laws.

Newton's First Law of

An object at rest tends to stay at rest, while 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.



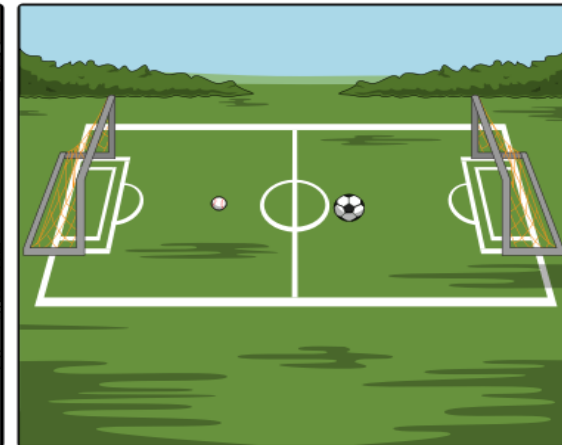
Newton's Second Law of Motion


The acceleration of an object as produced by a net force, in the same direction as the net force and inversely proportional to the mass of the object.



Newton's Third Law of Motion

For every action, there is an equal and opposite reaction.



- 
- Inertia = noun
 - Inert = adjective. You can use this adjective to describe something that will not move or a person who does not change their view, position or circumstances
 - The adjective can also be used in Science to define a special group of gases; inert gases or noble gases. Find out more [here](#)