

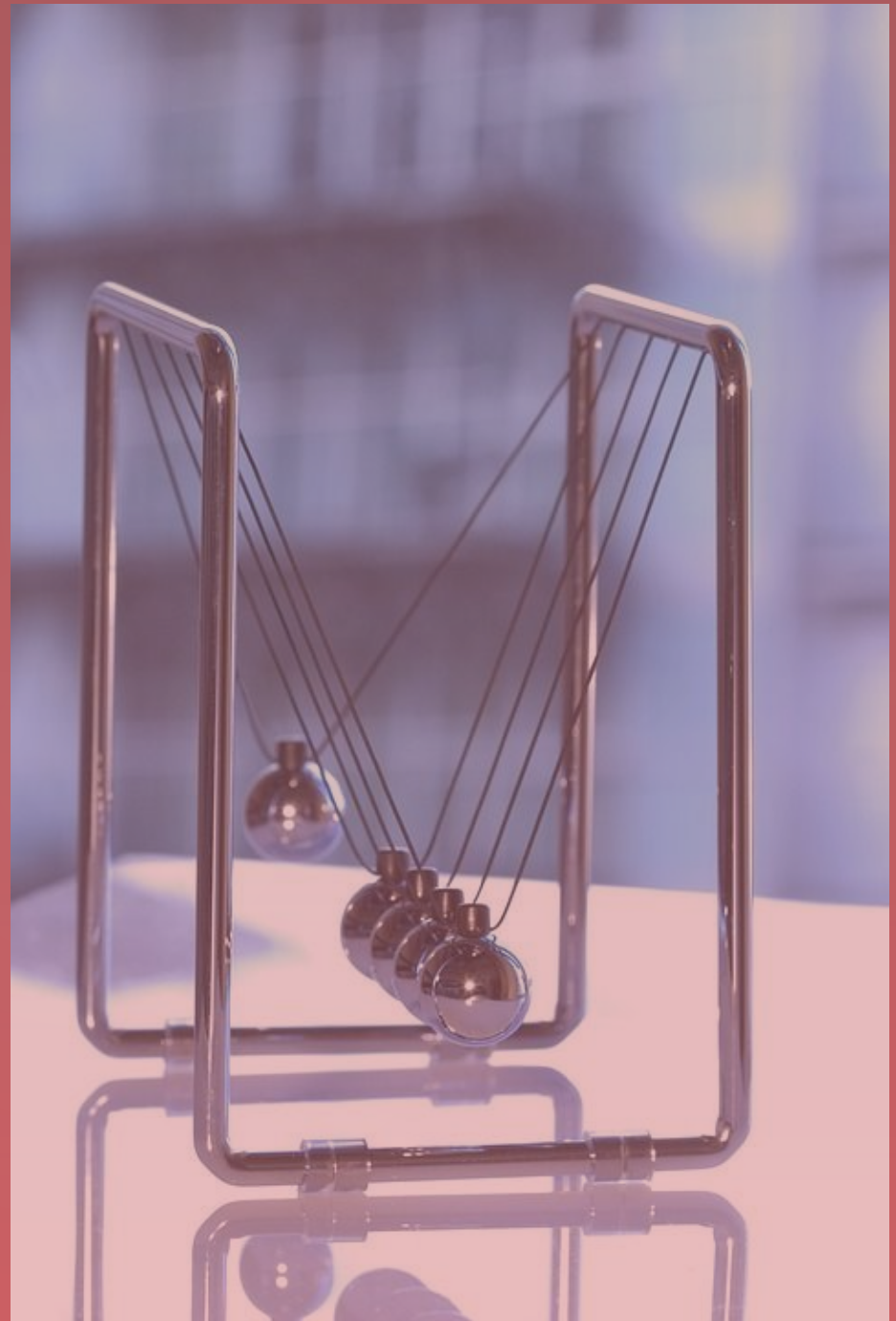
WHO?

We might heard these
terms before.

These are Newton's
Laws of motion.

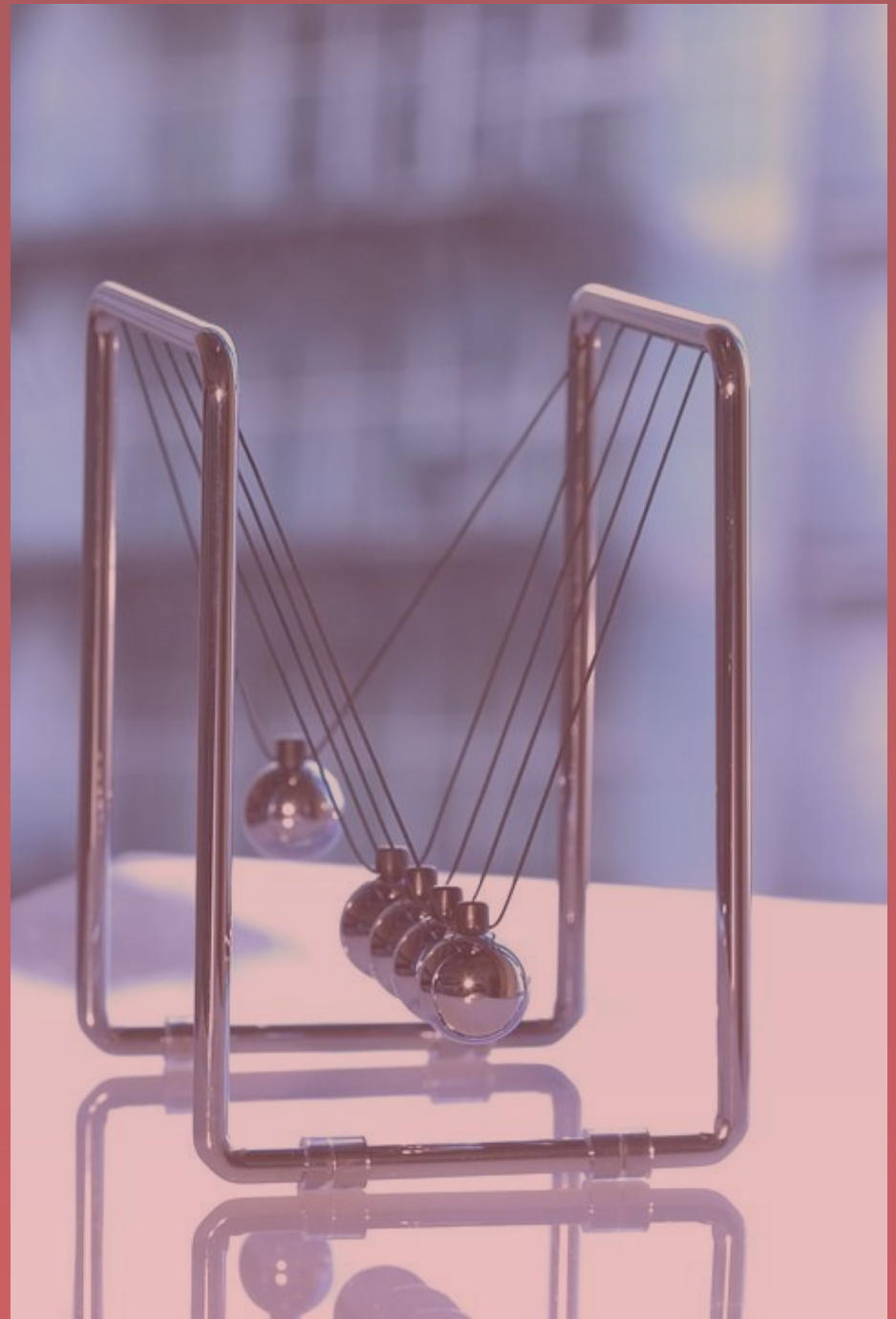
These are things we have
to know.

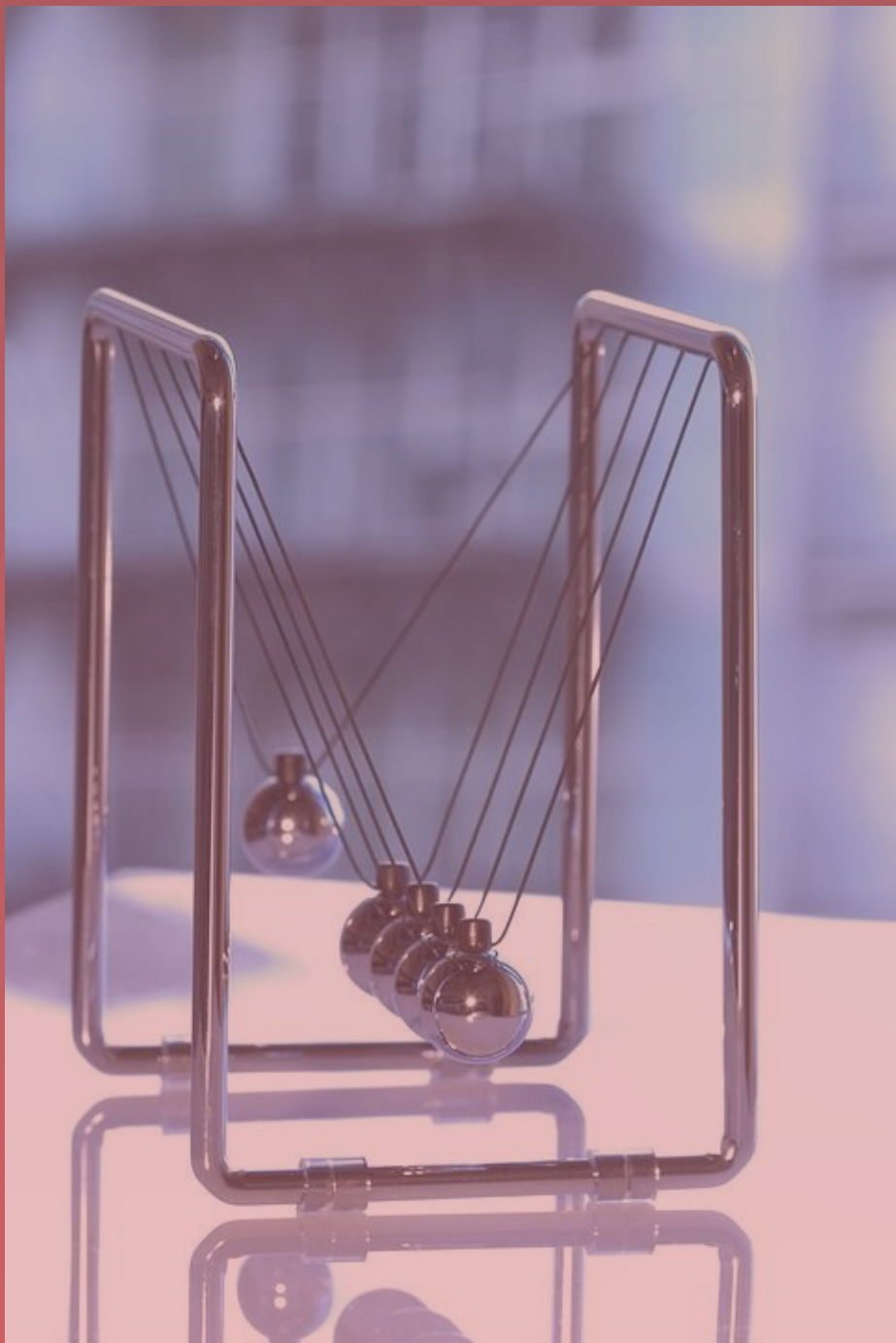
Play along don't say no...
no.



Let us start at word
motion...

A change in position
with respect to time,
speed, distance, and
acceleration.





ARE YOU
READY
TO LEARN
WITH ME?

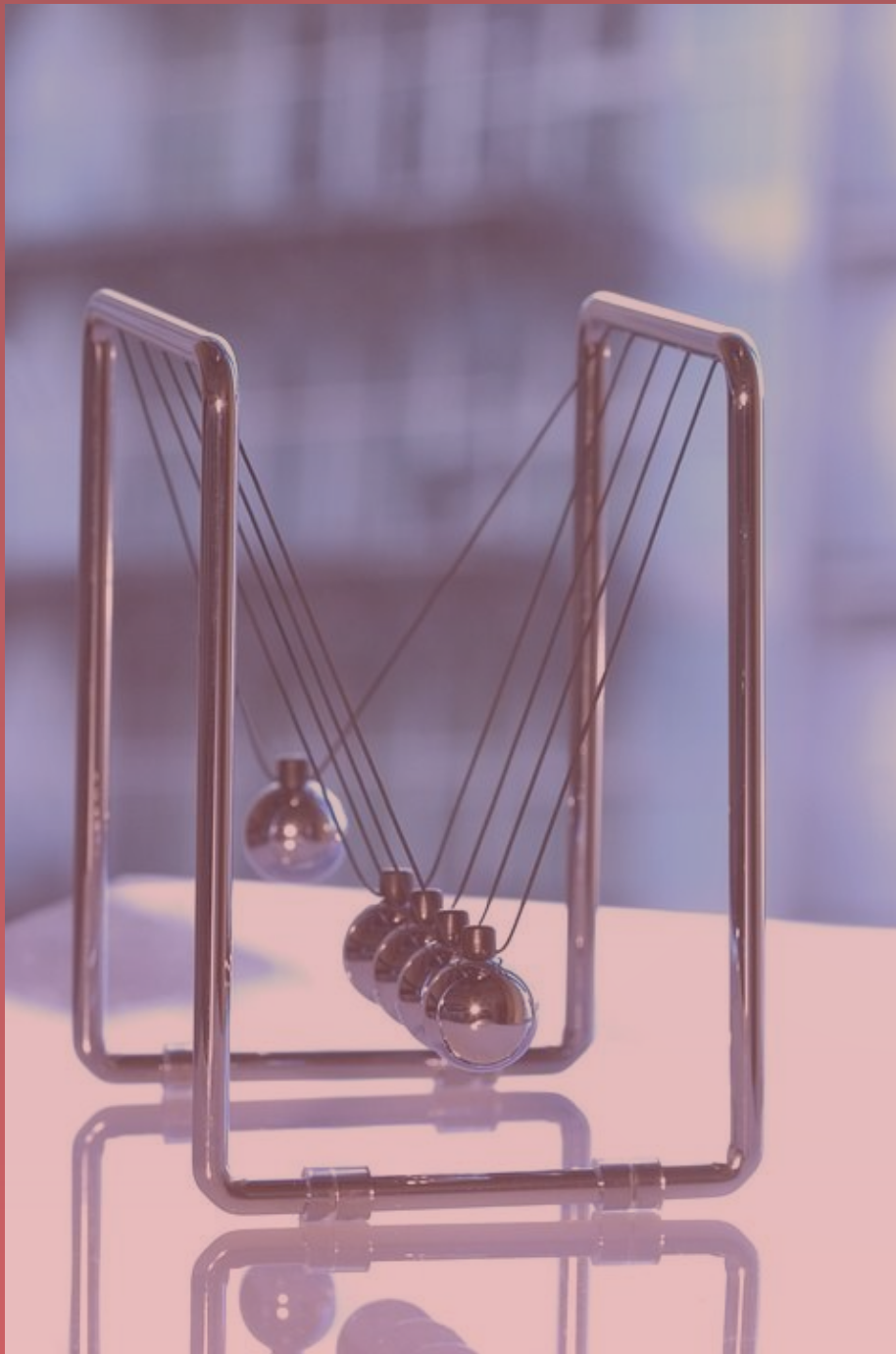


Newton's First law
states

“An object at rest
will remain at rest

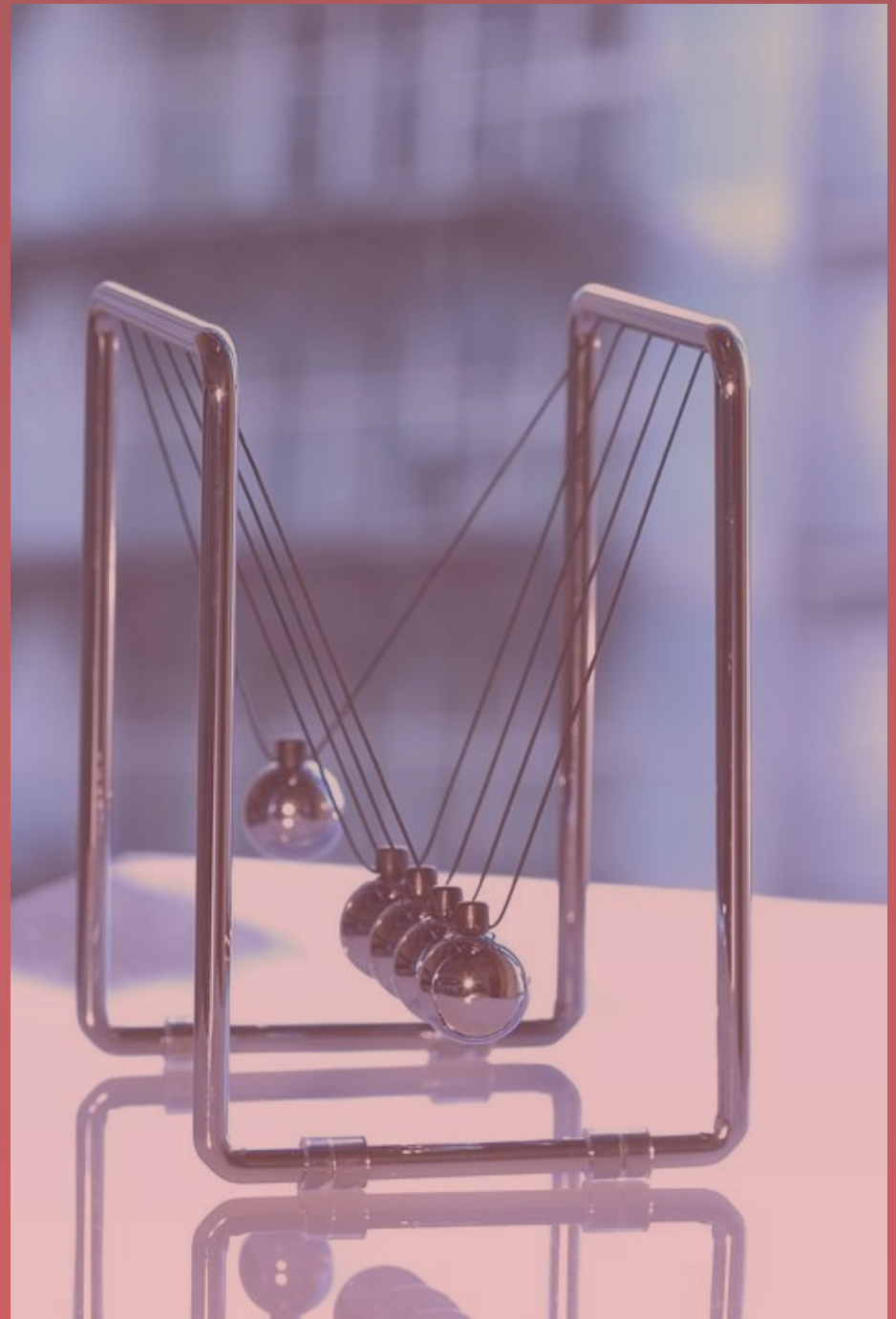
And an object in
motion will remain
in motion

Unless acted upon
by external net
force.



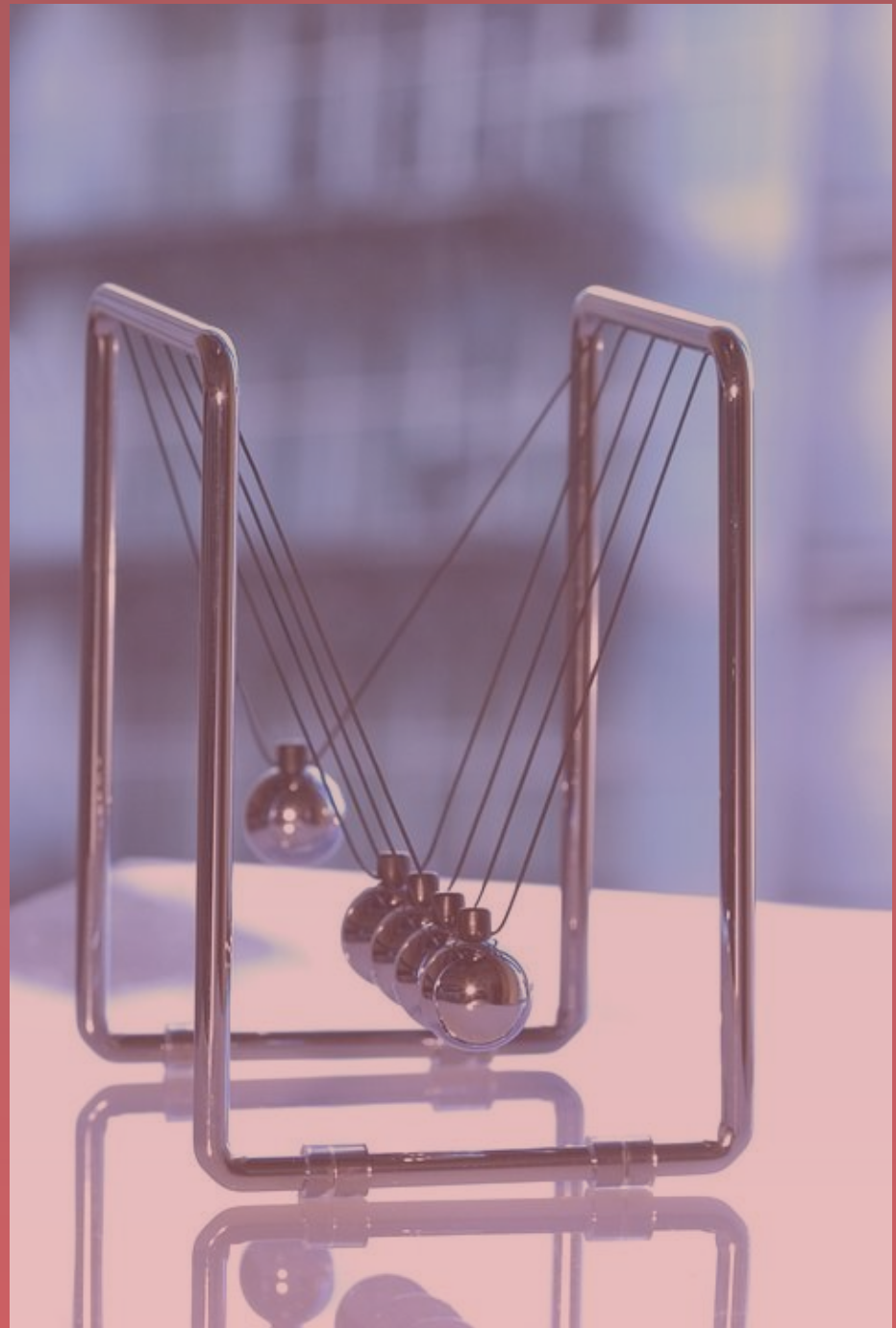
Don't worry
let's get ready
and here is the
second law.

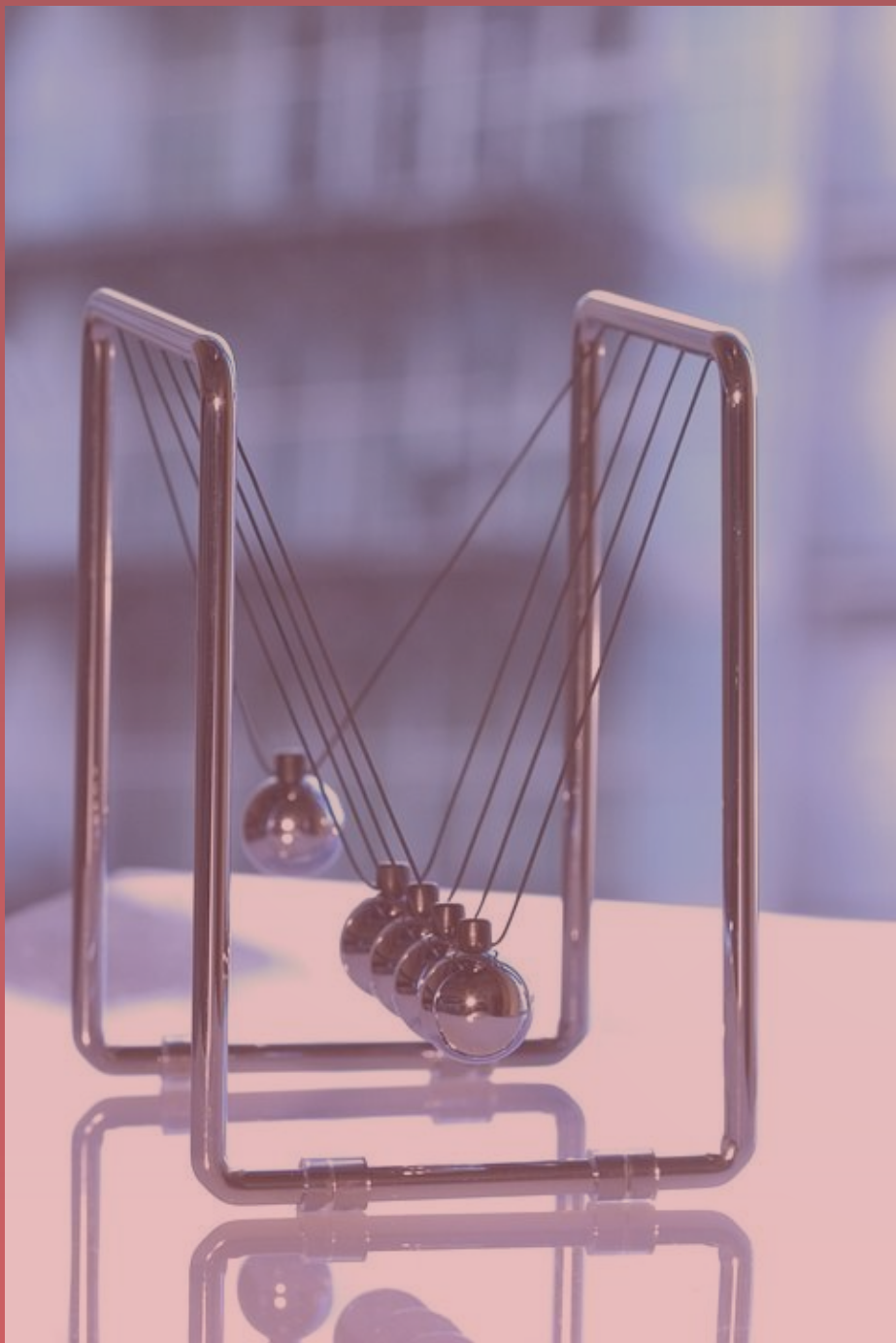
ARE YOU
READY
TO LEARN
WITH ME?



Just remember:

$$F = m \times a$$

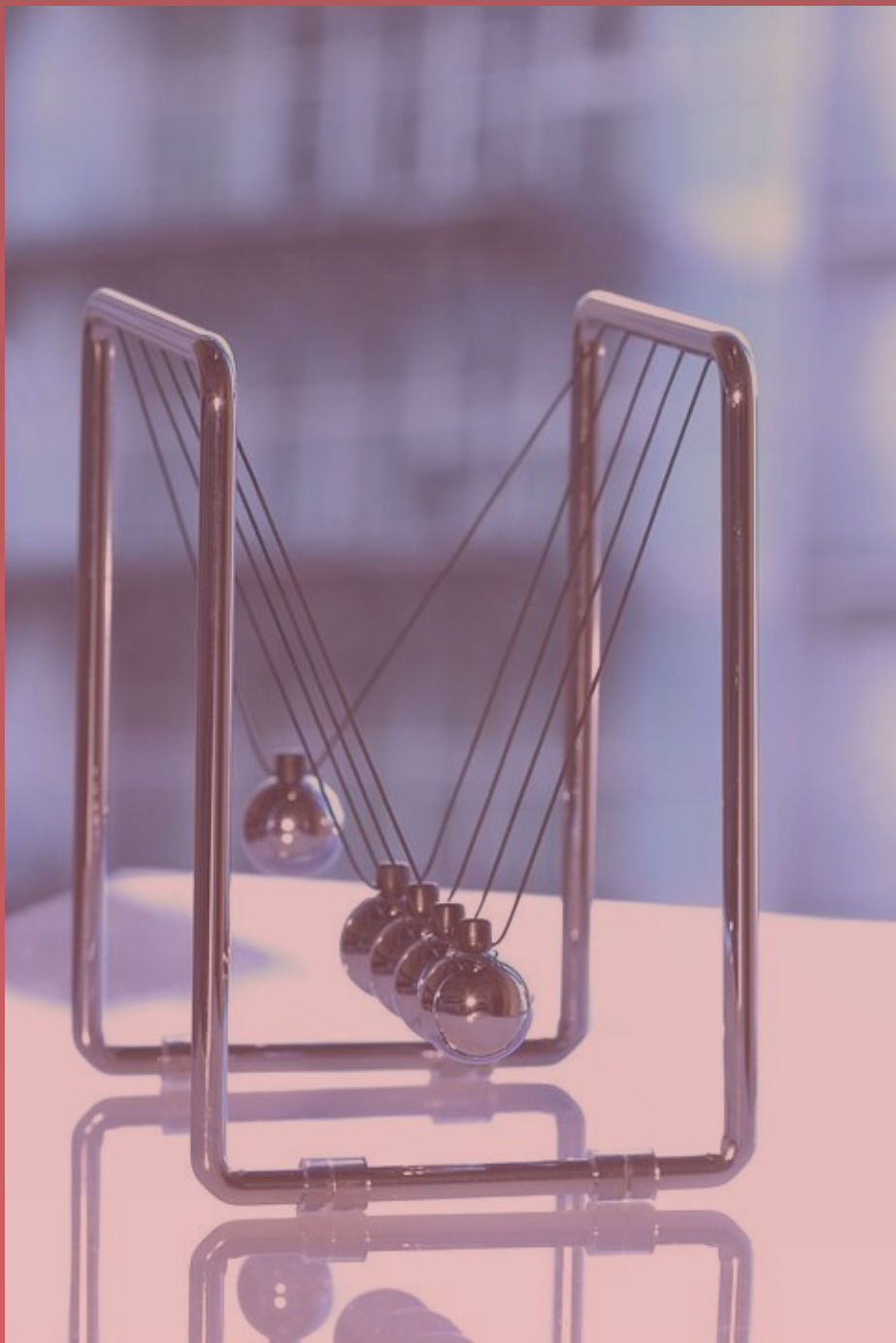




Let's move on... to
last law.

Law known as the
interaction.

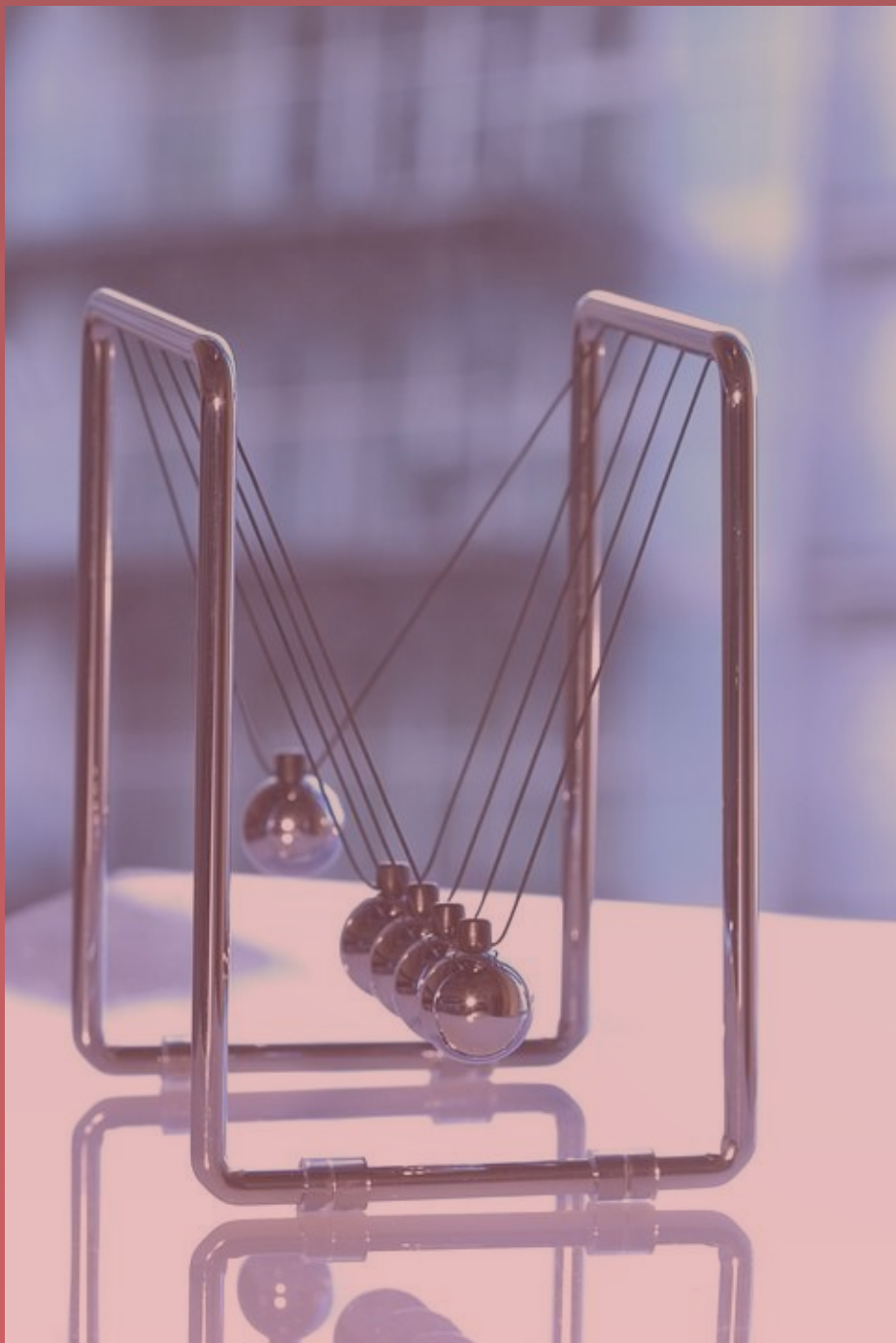
For every action
there is an equal...
Equal and opposite
reaction.



The Newton's laws
of motion will
provide
explanation.

From inertia,
acceleration up to
the interaction.

Are you ready?



ARE YOU
READY
ARE YOU
READY?!
TO LEARN
WITH ME?



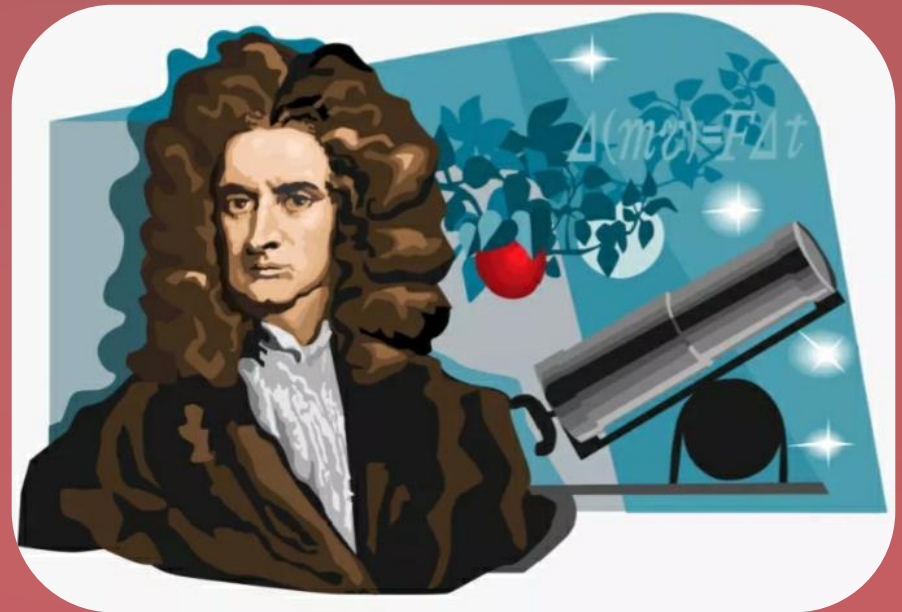
NEWTON'S OLYMPICS



LAWS OF MOTION



1. Law of Inertia
2. Law of Acceleration
3. Law of Interaction





Law of Inertia

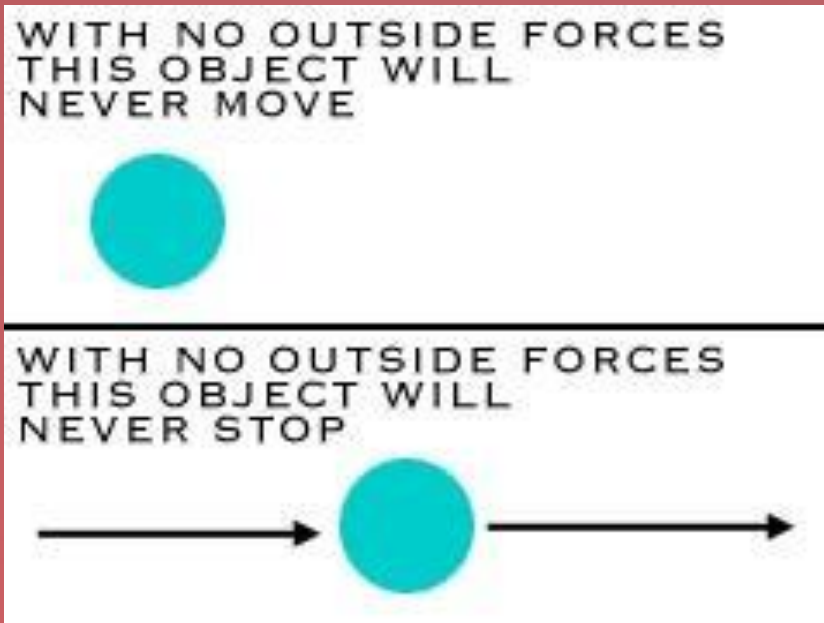
“An object at rest will remain at rest and an object in motion will remain in motion unless acted upon by external net force”

 Net force / unbalance force \gg either push or pull
(strength or energy)



Law of Inertia

- Inertia means the capacity of an object to resist to changes in motion.

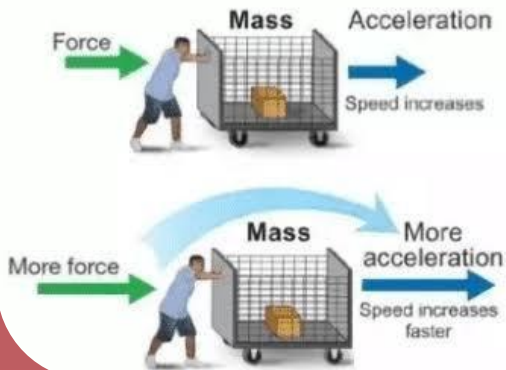




Law of Acceleration

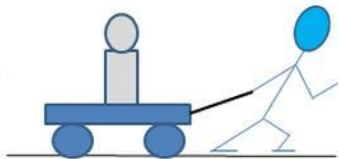
Newton's Second Law

If you apply more force to an object, it accelerates at a higher rate.

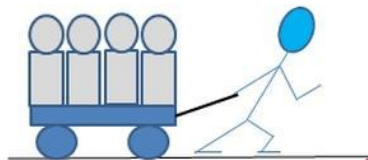


The acceleration of an object is directly proportional to the net force and inversely proportional to its mass.

To get the wagon to *accelerate*, you have to apply a PULL (Force).



If the MASS of the wagon increases, a greater PULL is necessary to accelerate it.



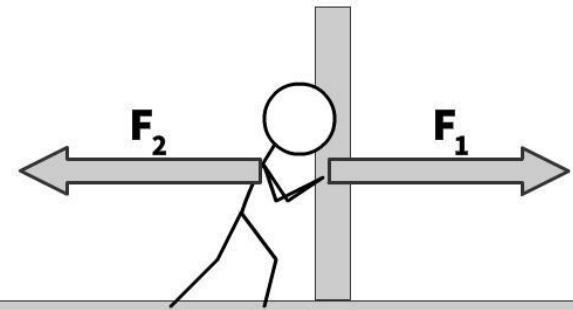


Law of Interaction

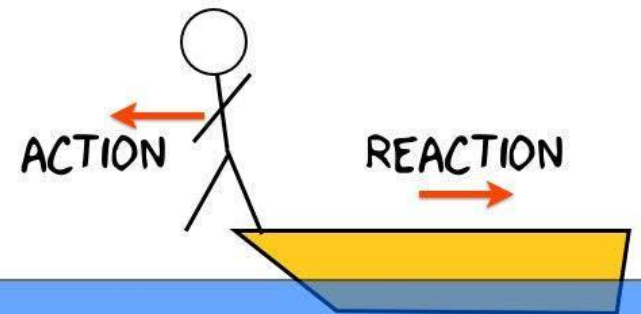
“If an object A exerts force on object B, then object B must exert a force of equal magnitude and opposite direction back to object A.”

In every action there is an equal or opposite reaction.

Newton's Third Law

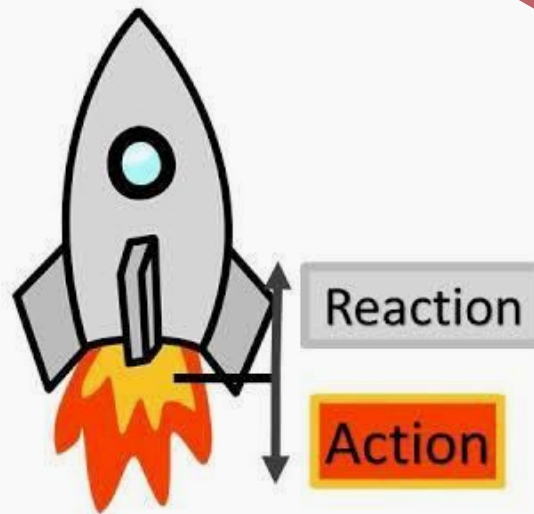


**Forces always Come in Pairs:
You Push on a Wall
the Wall Pushes Back**





Law of Interaction

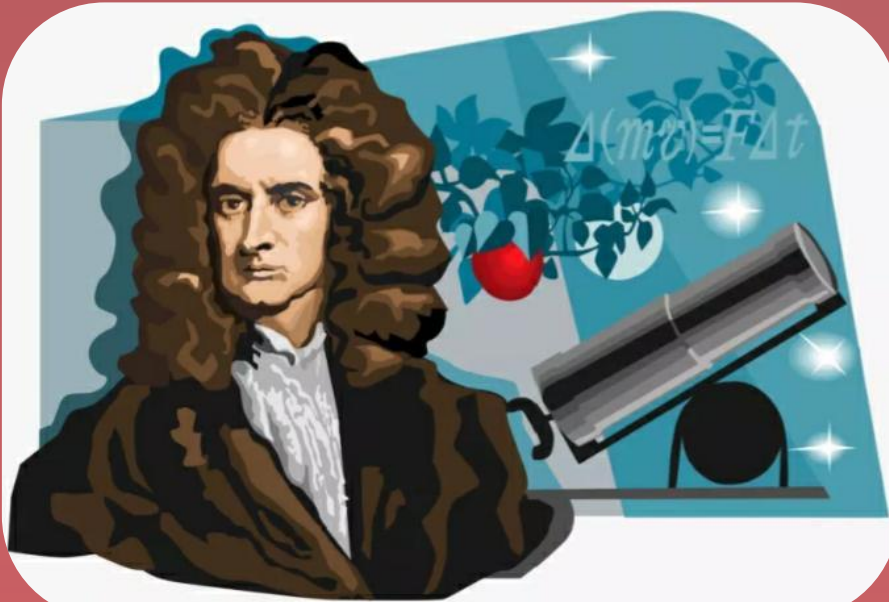




LAWS OF MOTION



THANK YOU!





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