

Newton's 2nd Law

Drag and drop

rolling	static	momentum
sliding	conservation of momentum	gravitational
ma	mv	opposite
frictional	centripetal	weight downward

I. Newton's Second Law

A. defined as: net force acting on an object causes the object to accelerate in the direction of the net force; $F = \underline{\hspace{10cm}}$

B. types of forces

1. $\underline{\hspace{10cm}}$ which opposes motion
 - a. $\underline{\hspace{10cm}}$ —when neither object is moving
 - b. $\underline{\hspace{10cm}}$ —when one object is sliding across another
 - c. $\underline{\hspace{10cm}}$ —when one object is rolling across another
2. $\underline{\hspace{10cm}}$ which occurs between any two objects
 - a. $\underline{\hspace{10cm}}$ is the gravitational force exerted on an object by Earth
 - b. an object that is shot or thrown follows a $\underline{\hspace{10cm}}$ path because of the force of gravity pulling it
3. $\underline{\hspace{10cm}}$ which causes an object to move in a circle

II. Newton's Third Law

A. defined as: to every action force there is an equal and $\underline{\hspace{10cm}}$ reaction force

B. $\underline{\hspace{10cm}}$: a property a moving object has because of its mass and velocity; $p = \underline{\hspace{10cm}}$

C. $\underline{\hspace{10cm}}$: momentum transfers from one object to another with the total momentum being conserved