

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; $F =$ _____
- B. types of forces
- _____ which opposes motion
 - _____—when neither object is moving
 - _____—when one object is sliding across another
 - _____—when one object is rolling across another
 - _____ which occurs between any two objects
 - _____ is the gravitational force exerted on an object by Earth
 - an object that is shot or thrown follows a _____ path because of the force of gravity pulling it
 - _____ 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 _____ reaction force
- B. _____: a property a moving object has because of its mass and velocity; $p =$ _____
- C. _____: momentum transfers from one object to another with the total momentum being conserved