

Newton's First Law

- Every object in a state of uniform motion tends to remain in that state of motion unless an external force is applied to it.

Newton's Second Law

- The relationship between an object's mass m , its acceleration a , and the applied force F is $F = ma$. Acceleration and force are vectors (as indicated by their symbols being displayed in slant bold font); in this law the direction of the force vector is the same as the direction of the acceleration vector.

Newton's Third Law

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