

Newton's Laws of Motion

Newton's Laws of Motion are three fundamental principles that describe the behavior of objects in motion.

1. First Law (Law of Inertia): An object at rest stays at rest, and an object in motion stays in motion unless acted upon by an external force.
2. Second Law ($F = ma$): The force acting on an object is equal to the mass of that object multiplied by its acceleration.
3. Third Law (Action & Reaction): For every action, there is an equal and opposite reaction.

These laws, formulated by Sir Isaac Newton in the 17th century, form the basis of classical mechanics and explain a wide range of physical phenomena.