Newton’s First Law of Motion:
An object at rest remains at rest and an object in motion remains in motion in a straight line at constant speed unless acted upon by an unbalanced force.
Called Inertia Law.

Newton’s Second Law of Motion:
\[ F = ma \]
For a given mass, the greater the force applied, the greater the acceleration produced. For a given force, the greater the mass of the object, the less the acceleration produced.

Stated in a different way:
For a given force, the smaller mass receives the greater acceleration.

Newton’s Third Law of Motion:
For every action, there is an equal and opposite reaction.
Called the Action-Reaction Law.