Newton's laws of motion

Newton's first and second laws of motion summarise how forces affect the motion of objects.

Law 1:

When the total force acting on an object is zero, the object remains at rest or moving at a steady speed in a straight line.

Law 2:

When there is a resultant force on an object, the object accelerates (its motion changes). The size of the acceleration is proportional to the size of the force and inversely proportional to the object's mass.