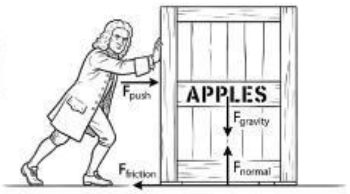
Physical Sci Honors : Forces and Motion Review Worksheet **Name:** _____ **Date:** _____

Part 1: Newton's Laws of Motion

Newton's Laws & Net Forces Review



Fill in the blanks with the correct term.

1. Newton's First Law, often referred to as the Law of _____, states that an object at rest remains at rest, and an object in motion remains in motion unless acted upon by an unbalanced _____.
2. The property of an object to resist a change in its state of motion is known as _____, which is directly related to the object's _____.
3. According to Newton's Second Law, if you increase the mass of an object while keeping the force constant, the object's _____ will decrease.
4. Newton's Third Law explains that forces always act in pairs; for every _____ force, there is an equal and opposite _____ force.

Part 2: Understanding Forces

Fill in the blanks with the correct term.

1. When the forces acting on an object are _____, the net force is zero, and the object's velocity will not change.
2. A force that requires objects to be physically touching, such as friction or air resistance, is called a _____ force.
3. Forces that can act over a distance without physical contact, such as gravity or magnetism, are called _____ forces.
4. If an object is moving and you apply a force in the opposite direction, the object will _____.

Part 3: Scalar and Vectors

Fill in the blanks with the correct term.

1. A _____ quantity has only magnitude, while a _____ quantity has both magnitude and direction.
2. Distance and speed are _____ quantities because they do not include a direction.
3. Displacement and velocity are _____ quantities because they include direction.
4. Mass is a _____ quantity, whereas weight and force are _____ quantities .