

Name:

Date:

Class:

Pre/Post Quiz **Answer Key**

Instructions: Complete the following:

1. Define force.
A physical quantity that denotes ability to push, pull, twist, or accelerate a body and that has a direction and is measured in a unit dimensioned in mass $\times$ distance/time² (ML/T²): SI: Newton (N).
2. List the types of forces you know.
Types of forces include tension, normal, static friction, kinetic friction, weight, spring force, magnetic force, and gravitational.
3. What is a free body diagram?
A diagram showing a single body or system of bodies with vectors indicating all forces acting on the system.
4. What is an inclined plane?
One of the simple machines; a sloping surface (e.g., a ramp) such that an object can be raised with less effort than being lifted vertically.
5. State Newton's second law of motion.
The rate of change of the momentum of a body is directly proportional to, and in the same direction as, the net force acting on it. Often stated as $F = ma$: F = force, m = mass, a = acceleration.