

Study Guide for Force and Motion Test

Force	Something that changes an object's state of rest or motion.
Motion	The change in an objects position over time.
Friction	The force that results from two surfaces rubbing against one another.
Gravity	A force that pulls anything on the Earth's surface toward the center of the Earth.
Newton's 1st Law/Inertia	The tendency of an object at rest to stay at rest, and a moving object to stay in motion, unless a force is introduced.
Newton's 2 nd Law	The greater the mass of an object being accelerated, the greater the amount of force needed.
Newton's 3 rd Law	For every action there is an equal and opposite reaction.
Acceleration	An increase in an object's velocity .
Velocity	How fast and in what direction an object is traveling.
Momentum	The amount of motion an object has.
Potential energy	Energy that is stored up in an object because of its position.
Kinetic Energy	The energy that an object has because it is moving .

Explain how friction can be helpful. For example the brakes on a car, traction on the bottom of your shoes, and skiing down a hill.