

Name _____ Block _____ Date _____

Ch 5. Newton's 2nd Law Vocab & Definitions

Mrs. Peck

air resistance	Friction, or drag, that acts on something moving through air.
fluid	Anything that flows; in particular, any liquid or gas.
free-body diagram	A diagram showing all the forces acting on an object.
inversely	When two values change in opposite directions, so that if one is doubled the other is reduced to one half.
Newton's 2nd Law	The acceleration produced by a net force on a body is directly proportional to the magnitude of the net force, is in the same direction as the net force, and is inversely proportional to the mass of the body.
pascal	the SI unit of pressure, one pascal of pressure exerts a normal force of one newton per square meter Pa
pressure	force per surface area where the force is normal to the surface: measured in pascals
friction	the force that acts to oppose motion between 2 materials in contact
static friction	the resistance force that must be overcome to start an object in motion
kinetic/ sliding friction	the resistance force between two surfaces already in motion
rolling friction	the resistance force between a surface and a rolling object
fluid friction	the resistance force of a gas or a liquid as an object passes through.
coefficient of sliding friction	is a ratio of the force of sliding friction to the normal force, it has no units high μ means object not likely to slide easily low μ is found between slippery surfaces
independent variable	the variable one changes on purpose
dependent variable	the variable that responds to the independent variable
constants	the variables that are not allowed to change
data table	chart that one enters the independent and dependent variables
graph	a visual representation of the data enabling easier interpretation of data

