Physical Science 1st Semester Final – Study Guide

Define / Describe displacement
Describe the difference between instantaneous speed and average speed
Calculate average speed
Define acceleration
Calculate acceleration
Define inertia
Describe Newton's three laws of motion
Define air resistance
Define centripetal force
Define action-reaction forces
Describe the difference between balanced and unbalanced forces
Define momentum
Calculate momentum
Describe the law of conservation of momentum
Know the value for acceleration due to gravity
Calculate force when mass and acceleration are known
Define hypothesis
Describe the difference between independent and dependent variables
Define constant
Define experiment
Define theory
Know how to use the ladder method to convert units in the metric system
Know the SI units for different types of measurements
Describe the factors that affect the gravitational force
Write a large or small number in scientific notation
Analyze a time- distance or a time-velocity graph
Describe the difference between static and sliding friction
Describe different types of energy and the transformations that take place
Define work Calculate work
Define power Calculate power
Describe the law of conservation of energy
Define kinetic, mechanical, and potential energy
Calculate kinetic, potential and mechanical
Electricity (use outline)