

## Physics Exam Review

Know all quantities and units used to measure them, including electricity.

Example: *distance* is measured in meters.

Know what each of Newton's 3 laws of motion state.

Be able to use your knowledge of physics to solve problems.

Challenges requiring the use of equations will ask you to be able to calculate:

Average velocity

Horizontal speed of a projectile object

Acceleration, mass, or force given 2 of the 3

Sliding and/or static friction

Work done by a force on a mass through a given distance

Momentum

Power needed/used in doing a given quantity of work

Frequency, wavelength, speed of both sound and light. (Put constants on your formula sheet.)

Frequency heard by a listener as a sound approaches or moves away.

Kinetic and potential energy changes, including masses, heights, velocities

Gravitational attraction between two objects

Angle of reflection, angle of incidence

Distance of an image formed by a concave mirror, height, magnification of the image

Be able to draw force or freebody diagrams, and diagrams for plane and concave mirrors.

Be prepared to list needed variables, write an equation (rearrange as needed to solve for a given variable) and write correct units with every number.