



ACROSS

- 2 Linear _____ is the product in classical mechanics of the mass and velocity of an object.
- 6 _____ impulse is a way to describe the efficiency of rocket and jet engines. It represents the impulse per unit of propellant.
- 8 Newton's _____ is a device that demonstrates conservation of momentum and energy. It is constructed from a series of pendulums (usually 5) abutting one another.
- 10 A _____ collision is a collision in which some of the kinetic energy of the colliding bodies is converted into internal energy in at least one body such that kinetic energy is not conserved.
- 11 _____ means the action of bodies striking or coming together.

DOWN

- 1 A _____ is defined in classical mechanics, when both the force and mass are constant, as the simple product of the force and time.
- 3 The center of _____ of a system of particles is a specific point at which, for many purposes, the system's mass behaves as if it were concentrated.
- 4 The coefficient of _____ or COR of an object is a fractional value representing the ratio of velocities before and after an impact.
- 5 A _____ law states that a particular measurable property of an isolated physical system does not change as the system evolves.
- 7 A _____ collision is a collision in which the total kinetic energy of the colliding bodies after collision is equal to their total kinetic energy before collision.
- 9 _____ is equal to the rate of change of the backward momentum resulting when a gun is fired.