



Intended for experimental study, physics laboratory and physics experiments on: solid mechanics, movement in one dimension, scalar kinematics, trajectory, distance traveled, initial and final position, displacement, reference, position, movement and trajectory, mobile, trajectory and displacement, difference between displacement and distance covered, Cartesian reference system, scalar quantity, vector quantity, uniform rectilinear motion (MRU), speed, displacements in one dimension, meeting of two pieces of furniture in MRU with opposite directions on the same trajectory, characteristics of uniformly varied rectilinear motion (MRUV), acceleration, Torricellis equation, dynamics, frictional forces, Newtons first law of motion, frictional force depends on the nature of the surfaces in contact, frictional force in relation to the contact area, Leonardo Da Vincis empirical law of friction, coefficient of static friction, Newtons first law of motion, kinetic friction force, determination of the coefficients of static friction and sliding kinetic friction, statics, driving force and its equilibrant in a movable on the inclined plane, conditions of equilibrium of a material point, force diagram, mechanical advantage of the simple inclined plane machine, conservation of energy, conservation of mechanical energy, rotational dynamics, center of mass, moment of inertia, linear and angular velocity, linear and angular velocities of solid and hollow cylinders, moment of inertia, moments of inertia of solid and hollow cylinders, kinetic energies of translation and rotation of cylinders, gravitational potential energy, potential energy, comparing the initial mechanical energy with the mechanical energy final, conservation of translational and rotational mechanical energy, tables, graphs, trend line, function, etc.

