



ACROSS

- 6 A _____ is a device based on the principle of conservation of angular momentum. The essence of the device is a spinning wheel on an axle.
- 8 A _____ is a movement of an object in a circular motion, around a center for a point, around a line called an axis for a three dimensional object.
- 10 _____ of inertia is the rotational analog of mass. That is, it is the inertia of a rigid rotating body with respect to its rotation.
- 12 Angular _____ is the rate of change of angular velocity.
- 13 A _____ body is an idealization of a solid body of finite size in which deformation is neglected.
- 14 The angular _____ specifies the angular speed at which an object is rotating along with the direction in which it is rotating.
- 15 _____ is the branch of physics concerned with the analysis of loads, ie. forces and torques, on physical systems in static equilibrium.

DOWN

- 1 One _____ is the angle subtended by an arc length equal to the radius of the circle.
- 2 Angular _____ of a body is the angle through which a point or line has been rotated in a specified sense about a specified axis.
- 3 _____ per minute is a unit of frequency: the number of full rotations completed in one minute around a fixed axis.
- 4 _____ or moment can informally be thought of as rotational force or angular force which causes a change in rotational motion. It is defined by linear force multiplied by a radius.
- 5 The angular _____ of an object rotating about some reference point is the measure of the extent to which the object will continue to rotate about that point unless acted upon by an external torque.
- 7 A system is in mechanical _____ when the sum of the forces and torques on each particle of the system is zero.
- 9 Sometimes called angular kinetic energy, the _____ energy is the kinetic energy due to the rotation of an object.
- 11 Angular _____ is a scalar measure of rotation rate. It is the magnitude of the angular velocity.