ACROSS

4 Simple _____ motion is the motion of a simple oscillator.

5 A harmonic _____ is a system which, when displaced from its equilibrium position, experiences a restoring force proportional to the displacement.

7 The _____ is a nonnegative scalar measure of a wave's magnitude of oscillation, the magnitude of the maximum disturbance in the medium during one wave cycle.

8 _____ is any effect that tends to reduce the amplitude of oscillations of an oscillatory system.

9 A _____ function is a function that repeats its values after some definite period has been added to its independent variable.

13 _____ is the variation of some measure about a central value (often a point of equilibrium) or between two or more different states.

DOWN

1 _____ refers to mechanical oscillations about an equilibrium point. The oscillations may be periodic such as the motion of a pendulum or random such as the movement of a tire on a gravel road.

2 _____ is the measurement of the number of occurrences of a repeated event per unit of time.

3 _____ is the quality of occurring at regular intervals or periods in time or space.

6 A _____ is a flexible elastic object used to store mechanical energy usually made out of hardened steel.

9 A _____ is an object that is attached to a pivot point so it can swing freely.

10 The _____ of an oscillation or wave is the fraction of a cycle corresponding to an offset in the displacement from a specified reference point at time t = 0.

11 The _____ is the SI unit of frequency. Its base unit is the cycle per second.

12 A _____ is the weight on the end of a pendulum.