

CLASS- 7 (PHYSICS)

Motion and Time

Activity-1

Time Ticker!

Viva Voce

1. If the mass of the pendulum bob is doubled, the period of a simple pendulum will-
 - a) Increase
 - b) Decrease
 - c) Stay the same
 - d) can't say
2. If the length of the string is increased, the period of a simple pendulum will-
 - a) Increase
 - b) Decrease
 - c) Stay the same
 - d) can't say
3. If the amplitude of the oscillations is reduced to half, the period of simple pendulum will-
 - a) remain the same
 - b) increase
 - c) decrease
 - d) become infinity
4. The period of a simple pendulum is 2 s. If you want to double the period (4s), which string will you need?
 - a. 1 m
 - b. 2 m
 - c. 3 m
 - d. 4m
5. If an astronaut takes a pendulum to the moon ($g=1.6\text{N/kg}$), the period compared to that on Earth will-
 - a. Increase
 - b. Decrease
 - c. Stay the same
 - d. Either increase or decrease
6. For a simple pendulum the time period of one oscillation is given by
 - a. $2\pi\sqrt{g/l}$
 - b. $2\pi\sqrt{2l/g}$
 - c. $2\sqrt{l/2g}$
 - d. $2\pi\sqrt{l/g}$
7. The length of a Second's pendulum, is
 - a. 99.0 cm

- b. 99.4 cm
- c. 100 cm
- d. 101 cm

8. In order to double the period of a simple pendulum, the length of the string should be-

- a) halved
- b) doubled
- c) quadrupled
- d) none of the above

9. The type of energy possessed by a simple pendulum, when it is at the mean position is:

- (a) Kinetic energy
- (b) Potential energy
- (c) Kinetic + Potential energy
- (d) Sound energy

10. If a pendulum clock is taken to mountain top it-

- a) lose time
- b) gain time
- c) first lose and then gain time
- d) first gain and then lose time

Answer Key:

- 1. c) stay the same
- 2. a) increase
- 3. a) remain the same
- 4. d) 4m
- 5. b) decrease
- 6. d) $2\pi\sqrt{l/g}$
- 7. b) 99.4 cm
- 8. c) quadrupled
- 9. a) kinetic energy
- 10. a) lose time