

GIRLS' HIGH SCHOOL AND COLLEGE- PRAYAGRAJ

E learn WORKSHEET NO-1

SESSION 2020-2021

CLASS- 7 A,B,C,D,E,F

SUBJECT- PHYSICS

INSTRUCTION: The parents to ensure that their ward watches the video instructions for this assignment by clicking on the given link: https://youtu.be/RjFoR_8_B1Q, <https://youtu.be/oZLwd0AiAyY> . She should revise the lesson given in the book and then work on the assignment. The completed assignment is to be downloaded and filed/ pasted in the subject file/ copy and kept ready for submission. The day date and procedure of submission shall be notified later.

CHAPTER- MOTION

Topic – 1. Simple pendulum

2. Speed and velocity
3. Distance and displacement
4. Uniform and non uniform motion

ANSWERS THE FOLLOWING QUESTIONS :

Q1. Define the following terms -

- Time period
- Amplitude

Q2. What are the two properties of simple pendulum on which the time period of the simple pendulum does not depend?

Q3. What is meant by seconds pendulum?

Q4. Differentiate between speed and velocity.

Q5. Write the difference between uniform and non-uniform motion

Q6. When does a body is said to be in non uniform motion ?

NUMERICAL PROBLEMS:

Q1. A simple pendulum makes 30 oscillations in 34.8 seconds. Find the time period of the pendulum.

Q2. The maximum speed of an athlete over short distances is 46km/h. Find the minimum time in which he can cover a distance of 200m.

Q3.A child marches at the speed of 1.5m/s. What distance will he cover in two hour?

Q4.A person walks 30 meters east, then walks 40 meters north. Determine distance and displacement.

Q5.A runner travels around rectangle track with length = 50 meters and width = 20 meters. After travels around rectangle track two times, runner back to starting point. Determine distance and displacement.

FILL IN THE BLANKS:

1. Displacement does not depend on the _____ path taken by the body.
2. _____ seconds are taken by a seconds pendulum to complete 20 oscillations.
- 3.The amplitude of a simple pendulum should not exceed _____ during experiments.
- 4._____ is a unit of speed.
5. The motion of body is said to be uniform when _____ remains constant.

True and False:

1. The time period of a simple pendulum is the time in which it moves from one extreme position to the other extreme position.
2. For a body moving from one point to another, the velocity and speed may be of equal magnitudes.
3. Aircraft travelling on a straight path at a constant speed is non uniform motion.
4. An object tied to a string being whirled around is in uniform motion.
5. If a body starts moving from a point and returns to the same point, its displacement is zero.

END