| INDIAN SCHOOL DARSAIT |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| DEPARTMENT OF SCIENCE |  |  |  |  |  |  |  |
| Subject : Science | Topic : MOTION AND TIME | Date of Worksheet : 04-09-2019 |  |  |  |  |  |
| Resource Person: Mrs.Induresmi | Class \& Division: VII ---- | Date: |  |  |  |  |  |
| Name of the Student: |  | Roll Number: |  |  |  |  |  |

## A Give one word for the following (1 mark each)

1. The standard unit of speed.
2. The name given to the metallic ball of a simple pendulum.
3. The distance covered by an object in a unit time.
4. The formula for calculating speed.
5. The SI unit of time.

B Fill in the blanks (1mark each)

1. The time taken by the pendulum to complete one oscillation is called $\qquad$
2. $\qquad$ is the device used to record the speed of a vehicle.
3. $\qquad$ is a device used to record the distance covered by a vehicle.
4. The to and fro motion of a simple pendulum is an example of a $\qquad$ motion.
5. $\qquad$ can be found by dividing the time taken for number of oscillations by number of oscillations.

## C Answer the following

1. Identify the ancient time measuring devices given below ( 1 mark each)

2. What do you mean by the statement 'a car is moving with the speed of $60 \mathrm{~km} / \mathrm{h}$ '?

## D Numerical problems (2 marks each)

1 A cheetah runs a distance of 200 meters in 10 seconds. What is the speed of the cheetah in $\mathrm{m} / \mathrm{s}$ ?
2 The distance between two stations is 240 km . A train takes 4 hours to cover the distance. Calculate the speed of the train.

3 The Shatabdi express takes 6 hours to travel from New Delhi to Lucknow at a speed of $80 \mathrm{~km} / \mathrm{h}$. Find the distance between New Delhi and Lucknow.

4 Raj covers a total distance of 750 km in his car with an average speed of $50 \mathrm{~km} / \mathrm{h}$. How much time does he take?

5 A pendulum takes 32 seconds to complete 20 oscillations. What is the time period of pendulum?

6 Calculate the time period if a simple pendulum completes 25 oscillations in 10 seconds.

## E Distance-Time Graph ( 3 marks)

1. Plot the distance- time graph for the given values.

| Distance(m) | 10 | 20 | 30 | 30 | 40 | 40 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Time(s) | 2 | 4 | 6 | 8 | 10 | 12 |

Is the motion uniform or not? Justify your answer.
2. What do the following graphs indicate? ( 1 mark each)




