

Science | Worksheet | Grade VII  
Time and Motion

- Speed of a body is measured in
  - metre
  - kilometre
  - metre/second
  - metre/sec<sup>2</sup>
- Which of the following cannot be a unit of speed?
  - km/h
  - s/m
  - m/s
  - mm/s
- The slope of a distance-time graph of a moving object indicates:
  - distance moved by the object
  - time is taken by the object
  - the speed of the object
  - the position of the object
- The regular vibrations of which of the following electrically driven crystals are used for measuring time very accurately?
  - calcite crystals
  - quadric crystals
  - chrome crystals
  - quartz crystals
- The clocks and watches which are used for measuring time are based on:

- (a) rectilinear motion
  - (b) circular motion
  - (c) periodic motion
  - (d) rotational motion
6. When the amplitude of vibrations of a simple pendulum is increased, then its time-period?
- (a) decreases
  - (b) increases
  - (c) remains the same
  - (d) first increases and then decreases
7. An athlete attains a maximum speed of 36 km/h. This speed is equal to:
- (a) 5 m/s
  - (b) 10 m/s
  - (c) 15 m/s
  - (d) 20 m/s
8. What do you mean by the statement; “car is moving with the speed of 50 Km per hour”?
9. Define uniform motion.
10. Express the speed of 60 m per minute in km per hour.
11. Define non- uniform motion.
12. The metallic ball in pendulum is called \_\_\_\_\_ of the pendulum.
13. Give an example of oscillatory motion.
14. A cyclist travels at a speed of 20 km/hour. How far will he travels in 50 minutes?
15. The symbol of all units is written in \_\_\_\_\_.
16. \_\_\_\_\_ motion may be along a straight line or along a curved path.
17. Motion along a curved path is called \_\_\_\_\_.
18. Name the device used to measure speed.
19. A cyclist covers 950 m in 5 minutes. Find his speed in km/ hour.
20. The speed of the train is 72 km per hour. Find its speed in metre per second.

21. What type of graph is used to represent motion of an object?
22. For a body in non-uniform motion, the graph is not a straight line. True/ False.
23. The working of a pendulum clock is based on the \_\_\_\_\_ of its pendulum.
24. Motion of the hammer of an electric bell is \_\_\_\_\_ motion.
25. Determine the time taken when, distance is 7150 km and speed is 780 km/hr.
26. If distance travelled by a train is 495 km in 4 hours 30 minutes, what is its speed?
27. What is motion? What are the two types motion?
28. Classify the following as rectilinear motion, circular motion or periodic motion (oscillatory motion):
- (a) The motion of your hands while running.
  - (b) The motion of a child on a see-saw.
  - (c) The motion of a horse pulling a cart on a straight road.
  - (d) The motion of a train on a straight bridge.
  - (e) The motion of the hammer of an electric bell