

## Class-VI (CHAPTER-10) MOTION AND MEASUREMENT OF DISTANCES

### Questions

---

1. Give two examples each of modes of transport used on land, water and air.
  2. Fill in the blanks:
    - (i) One meter is ----- cm.
    - (ii) Five kilometer is ----- m.
    - (iii) Motion of a child on a swing is -----.
    - (iv) Motion of the needle of a swing machine is -----.
    - (v) Motion of a wheel of a bicycle is -----.
  3. Why can a pace or footstep not be used as a standard unit of length?
  4. Arrange the following lengths in their increasing magnitude.  
1 m, 1 centimeter, 1 kilometer, 1 millimeter.
  5. The height of a person is 1.65 m. express it into cm and mm.
  6. The distance between Radha's home and her school is 3250 m. express this distance into km.
  7. While measuring the length of a knitting needle, the reading of the scale at one end is 3.0 cm and at the other end 33.1 cm. What is the length of the needle?
  8. Write the similarities and differences between the motion of a bicycle and ceiling fan that has been switched on.
  9. Why could you not use an elastic measuring tape to measure distance? What would be some of the problems you would meet in telling someone about a distance you measured with an elastic tape?
  10. Give two examples of periodic motion.
-

## Class-VI (CHAPTER-10) MOTION AND MEASUREMENT OF DISTANCES

### Answers

---

1. On land: Car, Train  
In water: Boat, Ship  
In air: Aeroplane, Helicopter.
  2. Fill in the blanks:
    - (vi) One meter is **100** cm.
    - (vii) Five kilometer is **5000** m.
    - (viii) Motion of a child on a swing is **circular motion**.
    - (ix) Motion of the needle of a swing machine is **periodic motion**.
    - (x) Motion of a wheel of a bicycle is **circular motion**.
  3. We cannot use pace or a footstep as standard unit of length as the size of foot and the footstep will not be the same for every individual. Thus, the measurement will not be same for different people.
  4. 1 millimeter, 1 centimeter, 1 meter, 1 kilometer.
  5.  $1.65 \text{ m} = 165 \text{ cm}$   
 $= 1650 \text{ mm}$ .
  6.  $3250 \text{ m} = 3.25 \text{ km}$ .
  7. Length of needle =  $33.1 \text{ cm} - 3.0 \text{ cm} = 30.1 \text{ cm}$ .
  8. Similarities: - Wheel of a bicycle and ceiling fan both shows circular motion.  
Differences: - Cycle moves in rectilinear motion but ceiling fan does not move in rectilinear motion.
  9. Elastic tap will not give accurate measurement because it stretches in length and reduces in size when not stretched. While telling the measurement taken with an elastic tape. We have to tell whether the tape was stretched and by how much. This is very difficult.
  10. Example of periodic motion-
    - (i) Pendulum
    - (ii) Child on the swing.
-