

## **NCERT SOLUTIONS- MOTION AND MEASUREMENTS OF DISTANCES**

NCERT Solutions for Class 6 Science Chapter 10 Motion and Measurement of Distances is the essential study material needed to perfect Motion and Measurement of Distances topics. The NCERT Class 6 Science solutions provided here correctly answer NCERT textbook questions. Solutions curated in a comprehensive manner will help students understand the subtopics in this chapter in a better way.

## **IMPORTANT SUB-TOPICS MENTIONED IN THE NCERT CLASS 6 SCIENCE CHAPTER 10 MOTION AND MEASUREMENTS OF DISTANCES:**

NCERT Solutions for Class 6 Science Chapter 10 Motion and Measurement of Distances has the following sub-topics as given below:

| Sr. no | Topics                                |
|--------|---------------------------------------|
| 1.     | Story of transport                    |
| 2.     | How wide is this desk?                |
| 3.     | Some measurements                     |
| 4.     | Standard units of measurements        |
| 5.     | Correct measurement of length         |
| 6.     | Measuring the length of a curved line |
| 7.     | Moving things around us               |
| 8.     | Types of motion                       |

## **NCERT SOLUTIONS CLASS 6 SCIENCE CHAPTER 10 MOTION AND MEASUREMENTS OF DISTANCES:**

1. Give two examples each, of modes of transport used on land, water and air.

ANS-

- Land- Train, Bus
- Water- Ships, Boat
- Air- Aeroplane, Helicopter

2. Fill in the blanks:

(i) One metre is \_\_\_\_\_ cm.

(ii) Five kilometres is \_\_\_\_\_ m.

(iii) Motion of a child on a swing is \_\_\_\_\_.

(iv) Motion of the needle of a sewing machine is \_\_\_\_\_.

(v) Motion of wheel of a bicycle is \_\_\_\_\_.

ANS-

- I. 100
- II. 5000
- III. Periodic

- IV. Periodic
- V. Circular

**3. Why can a pace or a footstep not be used as a standard unit of length?**

ANS- Since pace and footstep length differ from person to person, none can be utilised as a reference point for measurement.

**4. Arrange the following lengths in their increasing magnitude: 1 metre, 1 centimetre, 1 kilometre, and 1 millimetre.**

ANS- 1 millimetre, 1 centimetre, 1 metre, 1 kilometre

**5. The height of a person is 1.65 m. Express it into cm and mm.**

ANS-  $1.65 = 165 \text{ cm} = 1650 \text{ mm}$

**6. The distance between Radha's home and her school is 3250 m. Express this distance in km.**

ANS-  $1 \text{ km} = 1000 \text{ m}$

Hence,  $3250 \text{ m} = 3.25 \text{ kms}$

**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 is 33.1 cm. What is the length of the needle?**

ANS- Length of needle =  $33.1 - 3 = 30.1 \text{ cm}$

**8. Write the similarities and differences between the motion of a bicycle and a ceiling fan that has been switched on.**

ANS-

- Similarities: Both a bicycle's wheels and fan blades exhibit circular motion.
- Differences: Unlike a bicycle, which moves in a rectilinear manner, a fan moves in a circular motion.

**9. Why would you not like to use a measuring tape made of an elastic material like rubber to measure distance? What would be some of the problems you would meet in telling someone about a distance you measured with such a tape?**

ANS- An elastic measuring tape won't provide accurate measures because it extends and contracts in size. It is necessary to indicate whether the elastic tape was stretched when expressing measurements taken with it. If so, by how much? Therefore, it is quite challenging to determine the measurement obtained from an elastic tape.

**10. Give two examples of periodic motion.**

ANS-

- A needle of a sewing machine
- Pendulum