CBSE NCERT Solutions for Class 6 Science Chapter 10

Back of Chapter Questions

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

   **Solution:**

   Different modes of transports are used to go from one place to another.
   There are three modes of transport used in our life.
   These are examples of modes of transport.
   Land transport: Bus, train, motorbike.
   Water transport: Boat, ship, steamer.
   Air Transport: Aeroplane, Helicopter.

2. Fill in the blanks:

   (i) One metre is ____________ cm.
   (ii) Five kilometre 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 ____________.

   **Solution:**

   (i) One metre is 100 cm.
   (ii) Five kilometres is 5000 m.
   (iii) The motion of a child on a swing is periodic motion.
   (iv) The motion of the needle of a sewing machine is periodic motion.
   (v) The motion of the wheel of a bicycle is rotary motion.

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

   **Solution:**

   A pace or a footstep not be used as a standard unit of length because the size of pace
   and footstep can vary from person to person. This will lead to confusion while
   measuring the lengths by different persons. We should use a common unit or standard
   units like the International System of Units (SI Units).

4. Arrange the following lengths in their increasing magnitude:

   1 metre, 1 centimetre, 1 kilometre, 1 millimetre.

   **Solution:**

   1 millimetre, 1 centimetre, 1 metre, 1 kilometre.
5. The height of a person is 1.65 m. Express it into cm and mm.

**Solution:**

We know that 1 metre = 100 cm and 1 metre = 1000 mm

So, 1.65 m = 1.65 × 100 = 165 cm and 1.65 m = 1.65 × 1000 = 1650 mm.

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

**Solution:**

We know that 1 km = 1000 m

So, 3250 m = 3.25 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 is 33.1 cm. What is the length of the needle?

**Solution:**

The length of the needle = 33.1 cm - 3.0 cm = 30.1 cm

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

**Solution:**

Similarity: Bicycle and a ceiling fan show a circular motion.

Difference: Bicycle shows a rectilinear motion, whereas a ceiling fan does not.

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?

**Solution:**

Since the tape is stretchable, it will show the same measurements for different lengths. If we measure a certain distance twice using an elastic tape, then we may get different values for the same length each time. This is because elastic tapes are stretchable. Therefore, we cannot use it as measuring tape. It leads to incorrect measurements.

10. Give two examples of periodic motion.

**Solution:**

A motion which repeats itself regularly after a fixed interval of time is called periodic motion.

(1) Motion of a pendulum

The bob of a pendulum repeats its motion regularly after fixed intervals of time. This motion is called periodic motion.

(2) Motion of a boy sitting on a swing

The motion of a swing repeats itself after regular intervals of time. Hence, a boy sitting on a swing has periodic motion.