Exercise Questions   **Page number – 106**

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

Solution:

Land- Train., Bus
Water- Ship, Boat
Air- Helicopter, Airplane

2. Fill in the blanks:
(i) One metre is _____ cm.
(ii) Five kilometer 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 kilometer is **5000** m.
(iii)   Motion of a child on a swing is **periodic**
(iv)   Motion of the needle of a sewing machine is **periodic**.
(v)Motion of wheel of a bicycle is **circular**.

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

Solution:

Pace or a footstep cannot be used as a standard unit of length because it varies from person to person.

4. Arrange the following lengths in their increasing magnitude: 1 metre, 1 centimeter, 1 kilometer, 1 millimeter

Solution:

1 millimeter, 1 centimeter, 1 metre, 1 kilometer

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

Solution:

1.65= 165 cm = 1650 mm

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

Solution:

1km = 1000 m
Hence 3250 m = 3.25 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?

Solution:

Length of needle = 33.1 – 3 = 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:

Similarities- Both show circular motion

Differences- Bicycle wheels move in a rectilinear motion, but the fan does not move in rectilinear 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?

Solution:

An elastic measuring tape will not give accurate measurement as it stretches in length and reduces in size when stretched. When we express measurement taken with elastic tape, we have to tell whether the tape was stretched. If yes, how much. Hence it is very difficult to tell the measurement taken from an elastic tape.

10. Give two examples of periodic motion.

Solution:

a) Needle of a sewing machine
b) Pendulum