

Ncert Solutions Class 6 Science Chapter 10

Ncert Solutions For Class 6 Science Chapter 10 Motion & Measurements

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

Answer

Modes of transport used on land - Buses and Trains.

Modes of transport used on water - Ships and Boats.

Modes of transport used on air - Helicopters and Aeroplanes.

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 _____.

Answer

(i) One metre is 100 cm.

(ii) Five kilometre is

5000

m.

(iii) Motion of a child on a swing is

periodic motion

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(iv) Motion of the needle of a sewing machine is

periodic motion

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(v) Motion of wheel of a bicycle is

circular motion

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

Answer

The length of pace or a footstep varies from person to person. If the length of footstep will be used as standard unit for measurement of length then two measured quantity will not be same. Hence, footstep or pace is not a constant quantity and cannot be used as a standard unit of length.

4. Arrange the following lengths in their increasing magnitude:

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

Answer

1 millimetre > 1 centimetre > 1 metre > 1 kilometre

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

Answer

$$1.65 \text{ m} = 1.65 \times 100 \text{ cm} = 165 \text{ cm}$$

$$1.65 \text{ m} = 1.65 \times 100 \times 10 \text{ mm} = 1650 \text{ mm}$$

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

Answer

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

$$3250 \text{ m} = 3250/1000 \text{ km} = 3.25 \text{ km}$$

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?

Answer

The actual count of the length of the needle start from 3.0 cm instead of 0 cm. Thus, the actual length of the needle is $(33.1 - 3.0) \text{ cm} = 30.1 \text{ cm}$

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

Answer

Similarities:

- (i) Both the ceiling fan and the wheels of a bicycle show circular motion.
- (ii) Both are fixed at point.

Differences:

- (i) A bicycle shows rectilinear motion while a ceiling fan does not.

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?

Answer

An elastic tape is flexible and can be stretched. Thus, each time it will give different readings for the same length measured. Therefore, it is impossible to measure accurate distance from an elastic measuring tape.

10. Give two examples of periodic motion.

Answer

Two examples of periodic motion:

- (i) Motion of a pendulum clock.
- (ii) Motion of a swing.