

SCIENCE

CLASS 6

CHAPTER 10-MOTION
AND MEASUREMENT OF
DISTANCES

STORY OF TRANSPORT

- Today we have several means of transport- rickshaw, car, bus, train, aeroplane, etc. However, long ago none of these means of transport were available. People used to move only on foot. They carried goods either themselves or with the help of animals.
- The idea of making boats must have occurred when people saw logs of wood floating on water. They also realized that a boat made in the shape of a fish could travel faster.
- The invention of the wheel brought about a revolution in transport. The design of the wheel was improved over thousands of years. Later the animal power was replaced by engine power.

SOME MEASUREMENTS

- Let us work in a group and each of you use your handspan as a unit to measure the width of the desk. Record all the observations We see that measurement means the comparison of an unknown quantity with some known quantity. This fixed quantity is called unit.
- Are all the measurements done either by handspan or foot equal?

EXPLANATION:

We see that the measurement done by handspan or foot might vary, therefore some standard units of measurement are needed which do not change from person to person.

In ancient India, small length measurements were done by finger or fist. Many such body parts were used as a unit of length. However, everyone's body parts could be slightly different in size which caused confusion and hence the french created a standard unit of measurement called the metric system.

CORRECT MEASUREMENT OF LENGTH

- A) Hold the scale properly along the length of an object.**
- B) Take the measurement from 0 mark.**
- C) If the scale is broken, take the measurement from the next full mark and subtract the number from your reading to get the actual length.**
- D) The position of the eye should be exactly in front of the point of measurement.**

How to measure length of a curve?

- 1. Name the curved line AB.**
- 2. Take a thread and put a knot on one end of the thread.**
- 3. Move the thread along a curved line till the point B and make a mark on the thread.**
- 4. Place the knot on point A of the curved line.**
- 5. Measure the length of thread with a scale.**

MOTION AND IT'S TYPES:

- **Motion is the change in position of an object with time.**
- **Rectilinear motion-It is a motion in a straight line. Eg: Soldiers marching in a straight line.**
- **circular motion-When an object moves along a curved path.**
- **Periodic motion-Repetitive motion that repeats itself at regular intervals of time.**
- **Rotational motion- A motion of an object where the object moves around an axis and its different parts move through different distances in a given time is called rotational motion.**

SUMMARY

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