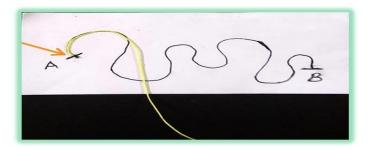
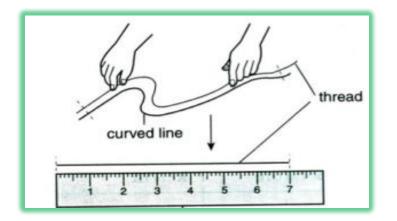
ATOMIC ENERGY CENTRAL SCHOOL, KAIGA CLASS 6 MODULE-2 HANDOUT-2 CH- 10: MOTION AND MEASUREMENT OF DISTANCES

Measuring the length of Curved Line

- Take a non-stretchable string or a thread and tie a knot at one of its ends.
- Place the knotted end of the thread at one end of the curved line.
- Holding the thread steadily with your fingers, stretch it along the curved line until you reach the other end.



- Now make a mark on the thread when it reaches the other end.
- Finally, place the thread along a meter scale and measure the length between the knot and the marked point.
- This gives the length of the curved line.



Motion is defined as change in the position of the object with respect to time.

There are three types of motion- Rectilinear motion, circular motion and periodic motion.

Motion along a straight line is called <u>rectilinear motion</u>. For example -March past of soldiers, Cars moving on a straight road, Athletes in a 100 m race.

An object is said to be in <u>circular motion</u> when it moves around a fixed point called axis. For example- Motion of a Giant wheel, Motion of blades of a ceiling fan, Motion of the hands of a clock.

Motion that repeats itself after a period of time is called as <u>Periodic</u> <u>motion</u>. For example- Motion of a pendulum, Motion of children on a swing, Branch of a tree moving to and fro.

Can an object undergo more than one motion at the same time?

- A ball rolling on the ground shows both rotational and rectilinear motion
- A sewing machine remains at the same location while its wheel moves with a circular motion. The needle moves up and down exhibiting periodic motion

- The pulley on which the rope is put has circular motion and bucket has linear motion
- The frisbee has rotational motion as well as linear motion in the direction it moves.