

DELHI MODERN PUBLIC SCHOOL

CLASS 6TH

SUB SCIENCE

TOPIC: MEASUREMENT AND MOTION

DAY 1

MEASUREMENT:

HOW TALL?

HOW HEAVY?

HOW MUCH? These questions are related to measurement. Measurement is used to measure height, length or capacity of something. We use measurement everyday. We say things like, this giraffe is tall. This box is too heavy. So we can say that size, length or amount of something is determined by measuring.

MEASUREMENT: Comparing an unknown quantity with some known quantity is called measurement.

The result of measurement has two parts, one part is number and other part is the unit. The known quantity which is used in measurement is called a unit. For eg when you say that your height is 150 cm then the measurement of your height is expressed as a number, i.e. 150 and its unit is cm.

TO MAKE IT UNDERSTAND IN A BETTER WAY I HAVE SEND THE VIDEO LINK...GO THROUGH THE LINK IT WOULD BE MUCH EASIER FOR YOU TO UNDERSTAND.

Day 2

STANDARD UNITS OF MEASUREMENT; It is the most widely used system of measurement in the world. Length, weight, and time are considered as basic quantities of measurement and other quantities are derived from them.

The unit of length is meter, unit of weight is kilogram and the unit of time is second.

REFER TO PAGE 135 IN YOUR BOOK, THERE IS TABLE GIVEN AT THE TOP REGARDING THE UNITS...LEARN IT PROPERLY

DAY 3

NEED FOR ACCURATE MEASUREMENT

The main reason behind invention of measurement was that people needed to equally distribute things, such as land, also make the distance between the buildings more exact.

MEASUREMENT OF A CURVED LINE..

A curved line is also called an “arc”, represents a portion of a circle. It is difficult to measure a curve with a straight –edged ruler .we need a tool called a protactor to measure a curved line.

REFER TO PART A IN THE BOOK PORTION AND MARK THE CORRECT OPTION IN YOUR BOOKS

1.D

2.B

3.A

4.C

5.B

6.D

7.D

TRY TO DO PART B ON YOUR OWN

PART C:

1.WHEEL 2. MEASUREMENT 3. METRE 4. RELATIVE TERMS 5. ROTATIONAL MOTION 6. OSCILLATORY MOTION 7. RECTILINEAR

LEARN PART A AND C

DAY 4:MOTION AND ITS TYPES:

MOTION:The change in position of an object with change in time is called motion.(refer to video that is given along)

TYPES OF MOTIONS

1,LINEAR MOTION:When the motion is in a straight line,it is called linear motion,e.g a car moving on a straight road.

2.CIRCULAR MOTION:When the motion is on a circular path,e.g the motion of earth in its orbit.

3.ROTATIONAL MOTION: When the motion of an object is around its axis ,it is termed as rotational motion.eg rotation of earth on its axis.

4.PERIODIC MOTION:When the motion is repetitive after a fixed interval,it is called periodic motion,e.g motion of a wing.

REFER TO PART D IN YOUR BOOK AND WRITE DOWN THE ANSWERS GIVEN BELOW IN YOUR FAIR NOTEBOOKS

1. A unit of measurement is a system used to describe how big or small something is. The unit changes depending on what you are measuring.

2. The S.I. unit allows people in different places and different countries to use same units, to avoid mistakes and understand each other more easily.

3. A parallax error is an error in reading an instrument due to eye of the observer and pointer are not in a line perpendicular to the plane of the scale.

4. Estimation can be used to simplify calculations.

5. A body is said to be in a state of rest when it does not move or its position does not change with time.

6. a. with respect to another person in train A, the person is at rest

b. with respect to the person in train B, the person is moving

c. with respect to bridge, the person is moving

DAY 5

TRANSPORTATION

Early man used to walk to travel. With passage, the discovery of wheel dramatically changed the modes of transport. Steam engines brought the next big revolution in the modes of transport. Internal combustion engines made it possible to replace steam engines. Moreover, internal combustion engines made it possible to make vehicles for personal transport. Jet engines helped in making the aircrafts faster.

REFER TO LONG ANSWER QUESTIONS

1. Body parts are not a reliable instruments for measurement. This is because different people might have body parts of different sizes, which can lead to inconsistent measurement.

2. Motion is a relative term because it takes place with respect to time and surrounding. It depends on observer's frame of reference.

3. Translational motion is the motion by which body shifts from one point in space to another. Example is the motion of a bullet fired from a gun. Other examples are a running boy, moving bus etc

4. Yes, a body or an object can have more than one type of motion. For example, when a ball is thrown upwards, it comes down, it has two types of motion, Translatory motion and uniform motion.

DAY 6:

5.The motion shown by the kite is a translational motion because the kite`s motion is not in the same direction..

6.The greatest advantage of SI system is that it has only one unit for each quantity.This means that it is never necessary to convert from one unit to another.

7.Measurement plays an important role in our daily lives because they are useful to do basic tasks,such as taking the temperature of the child with thermometer, to find out weights ,volumes and lengths of different substances.

8.Parallax error can occur while measuring the height of a person taller than me.Parallax error is the error that occurs due to measuring sight.To avoid the error the eye should be set parallel to measurement made.(draw diagram given in pg 137 fig 11.4)

DAY 7:

9.Motion of a ceiling fan is a circular motion,it covers equal distance with equal speed in equal intervals of time while as motion of a car is a rectilinear motion.(DRAW any 1 DIAGRAM GIVEN IN PG 140 fig 11.9)

10.There is no length and width of a cricket ground.It is a circle and circle is measured by circumference.Since radius can be measured by measuring tape,one can know the circumference of the circle.

DAY 8:LEARN SHORT ANSWER QUESTIONS

DAY 9:LEARN 5 LONG ANSWER QUESTIONS

DAY 10:LEARN THE REMAINING 5 LONG ANSWER QUESTIONS

