



# COLEGIO NACIONES UNIDAS I.E.D.

INSTITUCIÓN EDUCATIVA DISTRITAL DE EDUCACIÓN BÁSICA, MEDIA SUPERIOR,  
Aprobado según Resoluciones 10-085 DE MARZO 20 DE 2009  
PEI: FORMACIÓN INTEGRAL DE LÍDERES EMPRENDEDORES COMPETENTES, CON PRINCIPIOS  
DEMOCRÁTICOS, TECNOLÓGICOS, CULTURALES Y DEPORTIVOS  
LEMA: "EDUCACIÓN, CIENCIA, CULTURA Y DEPORTE PARA TRASCENDER"

## PHYSICS

### PREPARATORY WORKSHOP

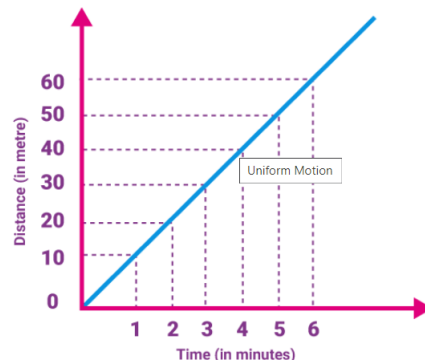
#### SIXTH GRADE

Delivery date November 3

Deliver in the notebook with complete procedures.

Uniform Motion:

Definition: This type of motion is defined as the motion of an object in which the object travels in a straight line, and its velocity remains constant along that line as it covers equal distances in equal intervals of time, irrespective of the duration of the time.



Suppose four students. Mario, Leo, Gisella and Rusber are running a 100m race. Mario takes 12s, Leo takes 13s, Gisella takes 14s and Rusber takes 15s to finish the race.

Calculate their speeds and record them on the chart given below. From the chart find:

1. Who is the fastest runner?
2. Who is the slowest runner?
3. What can you conclude about the relationship between speed and time?
4. A car moves at a speed of 20m/s for 120 seconds due East. What is the displacement of the car?
5. A bus travels 43 km in the first hour, 40km in the second hour and 46 km in the third hour of its journey. Calculate its average speed.
6. What are the main features of a velocity in a uniform motion?
7. The speed of an airplane is 360 km/hr, and another airplane has a speed of 120 m/s. which one of these two air planes has a greater speed? Why?

The motions of two bodies are measured and recorded in tables 'A' and 'B'.

A	s(m)	6	12	18	24	30	36	42	48
	t(s)	1	2	3	4	5	6	7	8
	v(m/s)								

B	s(m)	4	9	15	22	30	39	49	60
	t(s)	1	2	3	4	5	6	7	8
	v(m/s)								

8. Calculate the speed of the two bodies and complete the tables.
9. What is the difference between the speeds in A and B?
10. What do you call the type of speed in A and in B?