Provinci	al Denartment Of F	Description-Sabaragamuwa-Week School
Pr	uwa Province/ Weekly School	Department of Education, Sabaragamuwa Province/ Weekly School Department
Er muwa Province/We Prov Dep Subject- Science	ekly School Department of Educa ucation,Sabaragamuwa Provin	Week- 13 th Week - 17 th -23 rd Jan, 2021
- 0	Province/ Weekly School endy School Department of Educa ication.SabaragamuwaProvin	Translated By –Ms. M.R.D. Madhubahshini
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1) Fill in the blanks of the following statements regarding distance, displacement, speed, acceleration, velocity.

(i) The shortest length between initial point and final point along a certain direction when an object is moving

is.....

- (ii) The length of the path of a certain object, when an object is moving is.....
- (iii) The distance moved by an object in unit time is
- (iv) The rate of change of distance is
- (v) The rate of change of velocity is
- 2) Following represents the data of the movement of an object in 4 seconds. Complete the following statements using this data.

Time (s)	0	1	2	3	4
Distance(m)	0	5	10	15	20

- (i) The distance moved in 1st second =
- (ii) The distance moved in 2nd second =
- (iii) The distance moved in 3rd second =
- (iv) The distance moved in 4th second =
 - This expresses that the object travels same distance in every second. This is known as Or
- 3) Following represents the data of the movement of a motor vehicle in 4 seconds. Complete the following statements using this data.

Time (s)	0	1	2	3	4
Distance(m)	0	4	5	8	12

- (i) The distance moved in 1st second =
- (ii) The distance moved in 2nd second =
- (iii) The distance moved in 3rd second =
- (iv) The distance moved in 4th second =
 - This expresses that the object does not travel same distance in every second. Thus the object has travelled not in
 - Here, the distance travelled is m. Time spend for that is
 - The average speed is found in this situation.
 - Find the speed of the above object.

4) Following represents the data of the movement of a push cycle. Complete the following statements using this data.

Time (s)	0	1	2	3	4
displacement (m)	0	10	20	30	40

- (i) The displacement in 1st second =
- (ii) The displacement in 2nd second =
- (iii) The displacement in 3rd second =
- (iv) The displacement in 4th second =
 - The displacement of the object in every second has increased in amount. Therefore, • it is said that the object has travelled in constant velocity or uniform velocity.
 - The direction of velocity as well as the of an object which moving in constant velocity

. . . .

5) Following represents the data of the movement of a motor cycle. Complete the following statements using this data.

Time (s)		0	1	2	3	4	5	•
displacem	ent (m)	0	7	9	15	25	50	•
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(ii) The displ	acement	in 2nd se	econd =	=				
(iii) The displ	acement	in 3rd se	econd =	·				
(iv) The displ	acement	in 4 th se	cond =					

- The change of displacement in a second is not similar. Therefore, the motor cycle has not moved in
- The average velocity is found in this situation. Find the average velocity of motor cycle.