Physical Science

**Wkst - Review I for Chapter 2 Motion**

\_\_\_\_\_ 1. A measure of the path taken by an object is known as its \_\_\_\_\_\_\_

A. motion C. displacement

B. velocity D. distance

\_\_\_\_\_2. The distance and direction of the object’s change in position is known as its \_\_\_\_\_\_\_\_

A. motion C. displacement

B. velocity D. distance

3. You get out of your desk, walk 20 m, take a book from a table, walk back to your seat and sit down.

a) What is the distance you traveled?

b) What is your displacement?

**I CAN Explain the difference between speed and velocity**

\_\_\_\_\_ 4. The distance an object travels per unit of time is known as its \_\_\_\_\_\_\_\_\_\_

A. speed C. displacement

B. velocity D. distance

\_\_\_\_\_ 5. The speed of an object and the direction of its motion is known as its \_\_\_\_\_\_\_\_\_\_

A. speed C. displacement

B. velocity D. distance

\_\_\_\_\_ 6. The speed you read on a speedometer is an example of \_\_\_\_\_\_\_\_\_\_\_

A. instantaneous speed C. average speed

B. constant speed D. velocity

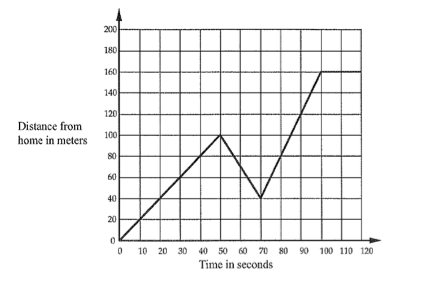
7. A dog runs 2 km in 0.4 hr. Calculate the dog’s speed.

8. A car is moving with a constant speed of 15.0 m/s along a straight path. What is the distance covered by the car in 720 sec?

9. You travel 190 km in 2 h. What is your speed in km/s?

10. Explain the difference between speed and velocity.

**I CAN Interpret motion graphs**



11. Explain the motion between 0-50 sec \*use specific speed(s) (show your work)

12. Explain the motion between 70-120 sec \*use specific speed(s) (show your work)

13. What is the average speed over 110 seconds?

**I CAN Describe how acceleration, time, and velocity are related**

\_\_\_\_\_14. Acceleration is the rate of change of \_\_\_\_\_\_\_\_\_.

A. position C. velocity

B. time D. force

\_\_\_\_\_15. To describe the velocity of an object, you need to know \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A. speed and direction C. direction and acceleration

B. speed and time D. speed and acceleration

**I CAN Explain how positive and negative acceleration affect motion**

|  |  |  |  |
| --- | --- | --- | --- |
| Speed |  |  |  |
|  |  |  |
|  |  |  |
|  | Time | | |

\_\_\_\_\_16. A horizontal line on the acceleration graph above shows \_\_\_\_\_\_\_\_\_\_\_\_\_\_ acceleration.

A. positive C. changing

B. negative D. zero

**I CAN Calculate the acceleration of an object**

17. Find the acceleration of a car that goes from 32 m/s to 96 m/s in 8 s.

18. An ostrich accelerates at 8 m/s2 to a speed of 40 m/s. If the ostrich was already running with a speed of 5 m/s, how long did it take to accelerate to its final speed?