Physical Science Worksheet: Linear Kinematics

Matching

A. Acceleration
B. Displacement
C. Distance
D. Final Velocity
E. Gravity
F. Initial Velocity
G. Instantaneous Acceleration
H. Instantaneous Position
I. Instantaneous Velocity
J. Kinematics
K. Linear
L. Magnitude
M. Position
N. Position-time Graph
O. Reference Point
P. Scalar
Q. Speed
R. Vector
S. Velocity
T. Velocity-time Graph

1. Relationship between variables acted in the same plane
2. Plot of velocity of object as a function of time
3. The acceleration an object has towards the mass it is attracted
4. The velocity of an object at a specific point in time
5. The separation between two points. A scalar quantity
6. Quantity that has only a magnitude or size. It is just a measurement
7. Size or measurement
8. The measurement of the acceleration of an object at a specific point in time
9. Change in velocity divided by time interval over which it occurred
10. Graph of object's motion that shows how its position depends on time
11. Ratio of distance to time
12. Ratio of change in position to time interval over which change takes place
13. Position of object at a specific time
14. Quantity having both magnitude and direction
15. Separation between object and a reference point
16. The velocity of the object at the point of time in question or when recording stops
17. Velocity of object at time: t=0 s or when recording starts
18. Study of motion of objects without regard to the causes of this motion
19. Change in position. A vector quantity
20. Zero location in a coordinate system or reference frame

Multiple Choice

John goes for a run. From his house, he jogs north for exactly 5.0 min at an average speed of 8.0 km/h. He continues north at a speed of 12.0 km/h for the next 30.0 min. He then turns around and jogs south at a speed of 15.0 km/h for 15.0 min. Then he jogs south for another 20.0 min at 8.0 km/h. He walks the rest of the way home.

21. How many kilometers does John jog in total?
    A. 3.4km B. 12.5km C. 13.1km D. 785km