

Revision Sheet

Chapter 5 - Motion, Forces

Part A- True/False

Indicate whether the statement is true or false.

1. To calculate speed, multiply the distance by the time.
2. The average speed of a moving object is equal to the total distance traveled plus the total amount of time taken to travel it.
3. To calculate average speed, use only the total time and the total distance.
4. To find an object's velocity, you must know the speed and direction of the moving object.
5. Weight is the upward force of Earth's gravity on all objects.
6. There is only one type of force.
7. The metric unit which measures force is the Newton.
8. Net force is one force acting on an object.

Part B- Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ____ 9. Runners competing in a race speed up and change direction as they run around a track. The runners are ____.
- | | |
|---------------------------------|-----------------|
| a. increasing electrical energy | c. accelerating |
| b. increasing potential energy | d. decelerating |
- ____ 11. A change in an object's position is called ____.
- | | |
|-------------|-----------------|
| a. motion | c. distance |
| b. velocity | d. acceleration |

- ____ 13. If you walk 1.5 kilometers in 30 minutes what is your average speed?
- a. 10 km/h
 - b. .75 km/h
 - c. .05 km/h
 - d. 1.0 km/h
- ____ 14. If you know the speed and direction of an object, which could you find?
- a. acceleration
 - b. velocity
 - c. size
 - d. apparent motion
- ____ 15. Any push or pull on an object is called a ____.
- a. lift
 - b. force
 - c. thrust
 - d. friction
- ____ 16. As the distance between two objects increases, the gravitational force between the objects ____?
- a. increases
 - b. decreases
 - c. creates friction
 - d. stays the same
- ____ 17. Acceleration is a change in the _____ of an object over time.
- a. speed
 - b. direction
 - c. motion
 - d. velocity
- ____ 18. An airplane travels 290 km between Austin and Dallas in 1 h and 15 min. What is its average speed?
- a. 160 km/h
 - b. 200 km/h
 - c. 232 km/h
 - d. 250 km/h
- ____ 19. When net forces are equal in strength and opposite in direction, they are said to be _____.
- a. balanced
 - b. unbalanced
 - c. negative
 - d. opposite