

Directions: Complete the paragraph by filling in the blanks using the terms listed below.

acceleration
negative

velocity
positive

direction
time

Acceleration occurs when an object's 1. _____ changes. When an object speeds up, it has 2. _____ acceleration. When an object's final velocity is less than its initial velocity, however, it has 3. _____ acceleration. An object that is changing 4. _____ is accelerating, even if its speed remains the same. Acceleration can be calculated by dividing the change in velocity by the 5. _____ interval in which the change occurred. The SI unit of 6. _____ is m/s^2 .

Directions: Match the terms in Column II with the descriptions in Column I. Write the letter of the correct term in the blank at the left.

Column I

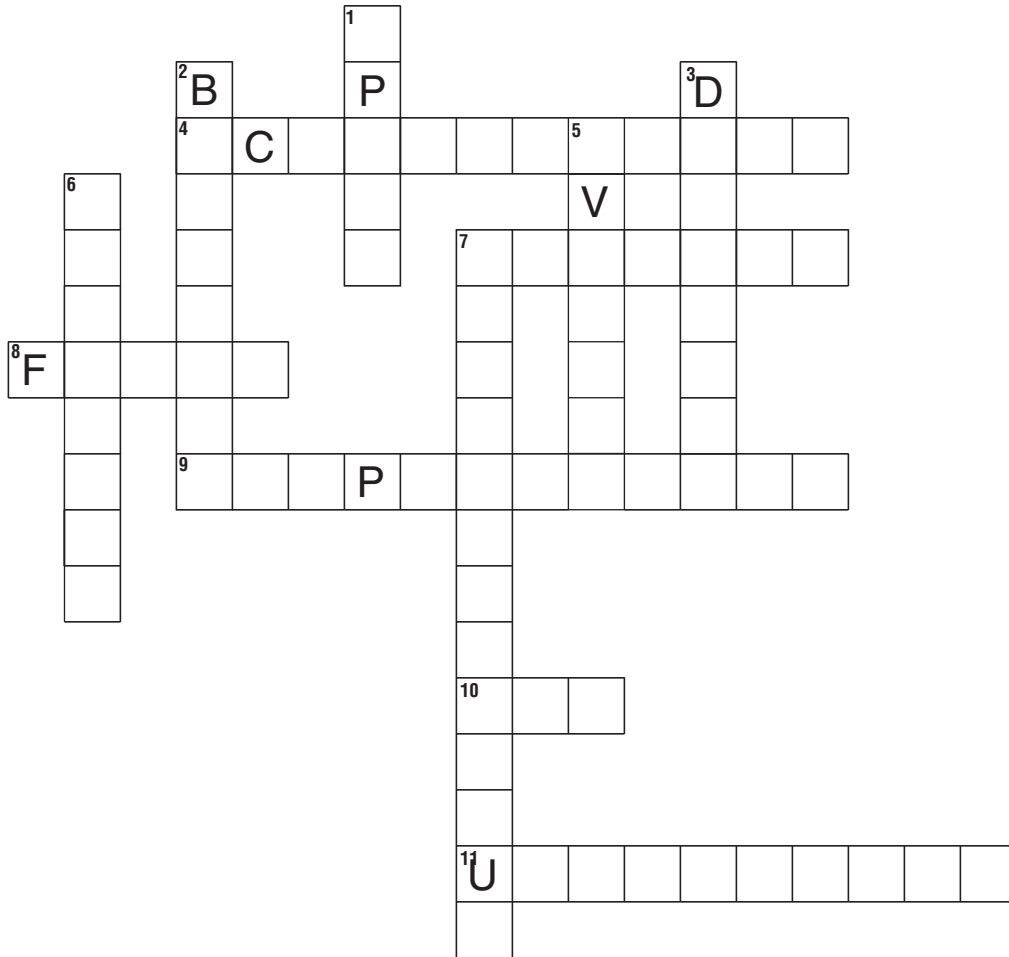
- _____ 7. result in a net force of zero
- _____ 8. the tendency of an object to resist any change in its motion
- _____ 9. cause an object's velocity to change
- _____ 10. a push or pull that can change an object's motion
- _____ 11. states that an object at rest will remain at rest unless acted upon by a net unbalanced force
- _____ 12. the combined force on an object

Column II

- a. force
- b. net force
- c. unbalanced forces
- d. balanced forces
- e. inertia
- f. Newton's first law of motion


Key Terms
Motion and Speed

Directions: Use the clues below to complete the crossword puzzle.


Across

4. the rate of change of velocity
7. the tendency of an object to resist any change in its motion
8. a push or pull that is exerted on an object
9. the distance and direction of an object from a starting point
10. Equal, but opposite, forces are said to result in a(n) _____ force of zero.
11. type of force that can change the velocity of a body at rest or in motion

Down

1. the distance an object travels per unit of time
2. forces on an object that are equal in strength but opposite in direction
3. a measure of how far an object has moved from a starting point
5. _____ speed is equal to the total distance traveled divided by the total time of travel.
6. includes both the speed of an object and the direction it is moving
7. The rate of change in position at a given point in time is _____ speed.