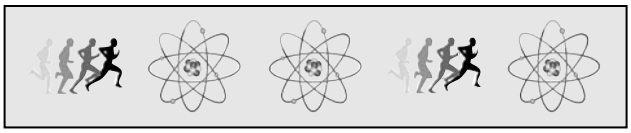
Name: _____

Date: _____ Grade: _____

SECTION QUIZ 12-1



Remember:
Score an average of 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2.5 points.

Fill in the blank or circle True or False

1. Average speed is calculated by dividing the total _____ by the total time.
   (a) acceleration (b) density (c) distance (d) force

2. Which of these is longer?_____
   (a) meter (b) yard (c) millimeter (d) inch

3. Speed is measured with units such as: _____.
   (a) m/sec, ft/sec, mi/hr
   (b) m/sec^2, ft/sec^2
   (c) pounds per square inch, newtons per square meter, pascals
   (d) volt/ohm, coulombs/sec, watts

4. If the distance is 256 miles and the time is 4 hours, the average speed is _____ miles per hour.

5. A kilometer is _____ meters.

6. Velocity measures the speed of an object as well as its: _____.
   (a) density (b) direction (c) gravitational attraction (d) mass

7. The _____ _____ is a single velocity that replaces two or more velocities.

8. The human body converts carbohydrates into _____.

9. _____ energy is transmitted by a machine and includes both kinetic and potentical energy.

10. Kinetic energy is the energy of _____.

11. Most energy changes produce _____.

12. The water behind a dam has gravitational _____ energy.

13. Heat is the random motion of: _____.
    (a) atoms and molecules (c) electrons
    (b) electromagnetic waves (d) photons

14. The form of energy most difficult to recover is: _____.
    (a) mechanical (b) potential (c) heat (d) kinetic

SECTION QUIZ 12-1

15. Fuel cells have about _____ percent efficiency.

16. Inclined planes, levers, pulleys and wheel and axles are examples of _____ machines.

17. A simple machine may change the direction that a force is applied without changing the amount of _____ that is required.

18. The formula for mechanical advantage is _____.

19. If a force is applied over 18 feet to raise a load three feet, the mechanical advantage is _____.

20. The one that is an example of a lever is a: _____.
    (a) loading ramp (b) pop-top can (c) screw (d) screwdriver

21. If the wheel is larger than the axle, the mechanical advantage is _____ than one.

22. A vise, scissors, and bicycle are examples of _____ machines.
    (a) simple (b) complex (c) mechanical (d) inefficient

23. A race car with zero _____ travels at constant speed.

24. To calculate acceleration, divide the change in _____ by the change in time.

25. The expression $a = F/m$ summarizes: _____.
    (a) the First Law of Motion
    (b) the Law of Universal Gravitation
    (c) the Second Law of Motion
    (d) the Third Law of Motion

26. Cars that are difficult to get moving, difficult to steer and difficult to stop on an icy pavement are following the First Law of Motion.
    (a) True or (b) False

27. When two skaters push away from each other, the one that receives the greater acceleration and higher final speed is the _____ skater.

28. The force of gravitational attraction between two bodies is inversely proportional to the _____ of the distance separating them.

29. A cat sitting in sunlight in a window is being warmed by: _____.
    (a) conduction (b) convection (c) radiation (d) internal combustion

30. Incan buildings were heated in the mornings by: _____.
    (a) burning the juice of fermented potatoes
    (b) geysers
    (c) radiant sunlight
    (d) the warmth from dogs

31. Radiant energy is a form of: _____.
    (a) atomic particles
    (b) electromagnetic waves
    (c) gravitational energy
    (d) motions of atoms and molecules

SECTION QUIZ 12-1

32. The heat transfer method that can act through the vacuum of space is: _____.
    (a) invection (b) conduction (c) convection (d) radiation

33. Convection is the transfer of heat energy: _____
    (a) by contact of one body to another (c) by currents in fluids such as water or air
    (b) by flames (d) through the vacuum of space

34. An example of heat transfer by convection is: _____.
    (a) a bird drying its wings in sunlight
    (b) a solar hot water heater
    (c) hot air being blown through a house by a forced air furnace
    (d) rocks conducing heat to the inner wall of a house

35. The center of a cake in an oven is cooked by: _____.
    (a) conduction (b) global warming (c) convention (d) radiation

36. "*A _____ without action remains a daydream."*

37. *"Unless you try to do something beyond what you have already mastered, you will never _____."*

38. "*We are not here to merely make a living. We are here to _____ the world, and we impoverish ourselves if we forget this errand."*

39. *"By removing _____from our relationships, we can usually see our positive options plainly*."

40. "*Wealth brings many friends, but a poor man's friends _____ him."*