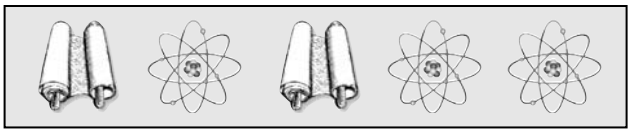
Name: _____

Date: _____ Grade: _____

SECTION QUIZ 4-2



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 2.27 points.

Fill in the blank or circle True or False.

1. Pascal's Principle of Fluid Pressure states: _____
_____.
(a) the velocity of a fluid and its pressure are inversely related
(b) an immersed body is buoyed up by a force equal to the weight of the fluid it displaces
(c) the volume of a gas is inversely related to the pressure provided temperature is kept constant
(d) pressure on a fluid confined in a container acts throughout the fluid in all directions and at right angles to the surface it contacts

2. Archimedes' Principle of Buoyancy states: _____
_____.
(a) the velocity of a fluid and its pressure are inversely related
(b) an immersed body is buoyed up by a force equal to the weight of the fluid it displaces
(c) the volume of a gas is inversely related to the pressure provided temperature is kept constant
(d) pressure on a fluid confined in a container acts throughout the fluid in all directions and at right angles to the surface it contacts

3. A balloon stops rising in the air when the balloon's weight becomes less than the weight of the air it displaces.
(a) True or (b) False

4. Density of gases is usually stated in: _____.
(a) grams per cubic centimeter
(b) grams per liter
(c) liters per grams
(d) inches

5. Boyle's Law relating volume and pressure of a gas states: _____
_____.
(a) the velocity of a fluid and its pressure are inversely related
(b) an immersed body is buoyed up by a force equal to the weight of the fluid it displaces
(c) the volume of a gas is inversely related to the pressure provided temperature is kept constant
(d) pressure on a fluid confined in a container acts throughout the fluid in all directions and at right angles to the surface it contacts

6. The volume of a gas is directly proportional to the _____ temperature.

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7. Diffusion takes place most rapidly in: _____.
   (a) solids (b) liquids (c) gases (d) fission

8. The name for the study of fluids at rest is _____.

9. The name for the study of fluids in motion is _____.

10. A viscous liquid is one that pours rapidly.
    (a) True or (b) False

11. To use less energy, a ship should be made so that the waves and eddies it causes are: _____.
    (a) increased (b) spoiled (c) decimated (d) reduced

12. Fluids that flow in smooth layers have _____ flow.
    (a) affluent (b) turbulent (c) laminar (d) fluent

13. To reduce resistance of a body as it moves through a fluid, its speed should be: _____.
    (a) increased (b) decreased (c) unchanged (d) dissolved

14. When a falling body reaches a speed at which the resisting force of the air balances the force of gravity, the body has reached its _____.

15. Bernoulli's Principle relating pressure and velocity of a fluid states: _____ _____.
    (a) the velocity of a fluid and its pressure are inversely related
    (b) an immersed body is buoyed up by a force equal to the weight of the fluid it displaces
    (c) the volume of a gas is inversely related to the pressure provided temperature is kept constant
    (d) pressure on a fluid confined in a container acts throughout the fluid in all directions and at right angles to the surface it contacts

16. A moving fluid speeds up when it passes through a pipe that becomes: _____.
    (a) wider (b) narrower (c) shorter (d) taller

17. The spin of a curve ball causes one side of the ball to have lower air pressure than the other side.
    (a) True or (b) False

18. The lift of an airplane wing can be explained in terms of Archimedes' Principle of Buoyancy.
    (a) True or (b) False

19. The motion of a fluid gives it kinetic energy.
    (a) True or (b) False

20. Pressure of a fluid is a form of potential energy.
    (a) True or (b) False

21. Laminar flow is harder to predict than turbulent flow.
    (a) True or (b) False

22. Heat is due to the motion of the molecules of a substance.
    (a) True or (b) False

23. The unit of heat energy in the metric system is the _____.

24. The amount of heat required to raise the temperature of one gram of a substance by one degree Celsius is the _____ capacity.

25. To raise the temperature of one gram of water by one degree Celsius requires one _____ of heat energy.

26. The heat capacity of a substance is the same whether it is a solid, _____ or gas.

27. Crystalline solids such as metals have definite melting temperatures.
    (a) True or (b) False

28. The amount of heat required to melt one gram of a substance is the latent heat of _____.

29. The amount of heat required to vaporize one gram of a substance is the latent heat of _____.

30. Liquid water at 100ºC is more likely to cause a serious burn than steam at the same temperature.
    (a) True or (b) False

31. Dry ice can change from a solid to a vapor without becoming a liquid.
    (a) True or (b) False

32. Evaporation causes a body to become: _____.
    (a) warmer (b) more excited (c) cooler (d) sweeter

33. Heat flows from a body of high temperature to a body with: _____.
    (a) less heat (c) lower temperature
    (b) more elevation (d) more superiority

34. Which of the following measures the average kinetic energy of the molecules of a substance? _____
    (a) heat (b) temperature (c) thermometer (d) barometer

35. The heat content of two bodies shows which way heat will flow between them.
    (a) True or (b) False

36. At small temperature differences, the efficiency of a heat engine is: _____.
    (a) high (b) low (c) medium (d) more efficient

37. Entropy is a measure of disorganization.
    (a) True or (b) False

SECTION QUIZ 4-2

38. In the universe as a whole, entropy is: _____.
    (a) decreasing (c) being destroyed
    (b) remaining the same (d) increasing

39. A heat pump causes heat to flow from cold to hot.
    (a) True or (b) False

40. *"Although we are not responsible for all of the things that happen to us, we are responsible for the way we _____ to them."*

41. *"I have always found, when I was worrying, that the best thing to do was to put my mind upon something, work hard and forget what was _____ me."*

42. *"As I grow older, I pay less attention to what people say. I just watch what they _____."*

43. *"_____ is one letter short of danger."*

44. *"Our patience will achieve more than our _____."*