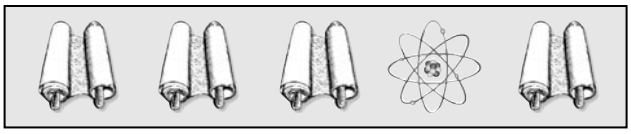
Name: _____

Date: _____ Grade: _____

SECTION QUIZ 4-1



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. A rubber band is described as elastic because it will stretch.
   (a) True or (b) False

2. If two balls are dropped from the same height and one bounces higher than the other, the ball that bounces higher is _____ elastic.
   (a) seldom (b) less (c) sometimes (d) more

3. An object that will change and keep its new shape easily is described as being: _____.
   (a) elastic (b) bouncy (c) solid (d) plastic

4. Hooke's Law relating force and deformation of a solid states: _____ _____.
   (a) the property of a solid that is plastic will maintain its deformed shape
   (b) the amount a solid is deformed is directly proportional to the force being applied
   (c) atmosphere is equal to the pressure at sea level
   (d) the upward force a fluid exerts on an object is the definition of buoyancy

5. If a weight of four ounces causes a rubber band to stretch three inches, then eight ounces will stretch the rubber band _____ inches.

6. Which of these have fixed volumes: _____.
   (a) solids and liquids (c) gases only
   (b) liquids and gases (d) liquids only

7. Which of these are examples of flow: _____.
   (a) solids and liquids (c) gases only
   (b) liquids and gases (d) liquids only

8. Which of the following has a fixed shape: _____.
   (a) gas (b) liquid (c) oil (d) solid

9. Which of the following would expand to fill a room: _____.
   (a) solid (b) liquid (c) gas (d) oil

10. The attraction between molecules of the same substance is: _____.
    (a) adhesion (b) admission (c) cohesion (d) supervision

SECTION QUIZ 4-1

11. Molecules of a substance cling to one another primarily because of gravity.
    (a) True or (b) False

12. The electron has no role in chemical bonds.
    (a) True or (b) False

13. The attraction between two different surfaces is: _____.
    (a) cohesion (b) buoyancy (c) admission (d) adhesion

14. Water can rise in a fine glass tube by: _____.
    (a) buoyancy (b) capillary action (c) heating receptors (d) freezing

15. Density is: _____.
    (a) volume divided by surface area (c) mass divided by volume
    (b) volume divided by mass (d) weight divided by surface area

16. _____ is the element with the greatest density.

17. Specific gravity compares the density of a substance to the density of water.
    (a) True or (b) False

18. Pounds per square inch are a measure of: _____.
    (a) density (b) pressure (c) volume (d) weight

19. The pressure of a liquid is directly related to the distance: _____.
    (a) to the bottom of the container (c) to the top of the liquid
    (b) from the top of the container (d) to the surface of the liquid

20. The bottom of a dam is usually thicker than the top because the bottom of the dam must: _____.
    (a) resist a greater pressure from the water
    (b) hold back a greater volume of water
    (c) be rebuilt
    (d) be opened on a regular basis

21. A mercury column exerts more pressure than a water column of the same height.
    (a) True or (b) False

22. The density of the atmosphere is greater: _____.
    (a) on Mars (c) at the earth's surface
    (b) on a mountain peak (d) below the earth's surface

23. Water and most liquids can be compressed when put under pressure.
    (a) True or (b) False

24. As a person dives deeper into the ocean, pressure increases.
    (a) True or (b) False

25. Hydrostatics is the study of fluids at rest.
    (a) True or (b) False

26. Hydrodynamics is the study of: _____.
    (a) stationary fluids (c) thick fluids
    (b) fluids in motion (d) mountain of fluids

27. The statement that confined fluids transmit pressure equally in all directions and exert the pressure at right angles to the surface of the container is: _____.
    (a) Archimedes' Principle of Buoyancy (c) Pascal's Principle
    (b) Archimedes' Law of Supremacy (d) Jones' Law of Equality

28. State the equation for the mechanical advantage of a hydraulic press: M.A. = _____.

29. Water exerts a pressure on all surfaces of a submerged object, including the top and bottom.
    (a) True or (b) False

30. Water exerts a pressure against all surfaces of a submerged object, but the water pressure is greatest on the _____ surface of the object.
    (a) lower (b) top (c) outside (d) inside

31. The net force water exerts on a submerged object is in the _____ direction.
    (a) downward (b) circular (c) sideways (d) upward

32. Archimedes' Principle of Buoyancy states: _____.
    (a) the amount a solid is deformed is directly proportional to the force being applied
    (b) fluids in a container transmit pressure equally in all directions
    (c) pressure in a small cylinder is transmittal to the entire surface of the larger cylinder
    (d) the lifting force on a solid object immersed in a fluid is equal to the weight of the fluid displaced

33. A stone lowered into water will weigh less than the same stone in the air.
    (a) True or (b) False

34. An object that weighs 27 grams sinks and displaces 10 grams of water. Its weight in water will be _____ grams.

35. A solid object with a density greater than the density of water will float in water.
    (a) True or (b) False

36. *"If opportunity doesn't knock, build a _____."*

37. *Louis Pasteur believed: "science and peace will _____ over ignorance and war."*

38. *"Admonish your friends privately, but _____ them openly."*

39. *"If God does not exist, one will lose nothing by believing in Him, while if He does exist, one will lose _____ by not believing."*

40. *"Everyone has _____. You just have to learn what your own limits are and deal with them accordingly."*