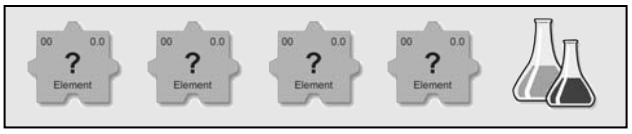
Name: _____

Date: _____ Grade: _____

SECTION QUIZ 7-1



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 1.5 points.

Fill in the blank or circle True or False.

1. Mendeleev arranged the elements based on their: _____.
   (a) taste and smell (c) color and density
   (b) boiling and melting temperatures (d) valence and atomic weight

2. To silence his critics, Mendeleev predicted the existence of missing elements and described their properties.
   (a) True or (b) False

3. A horizontal row of elements in the periodic table in which the elements change from metals to nonmetals is a: _____.
   (a) family (b) mystery (c) period (d) solid

4. Elements on the left side of the periodic table are _____.

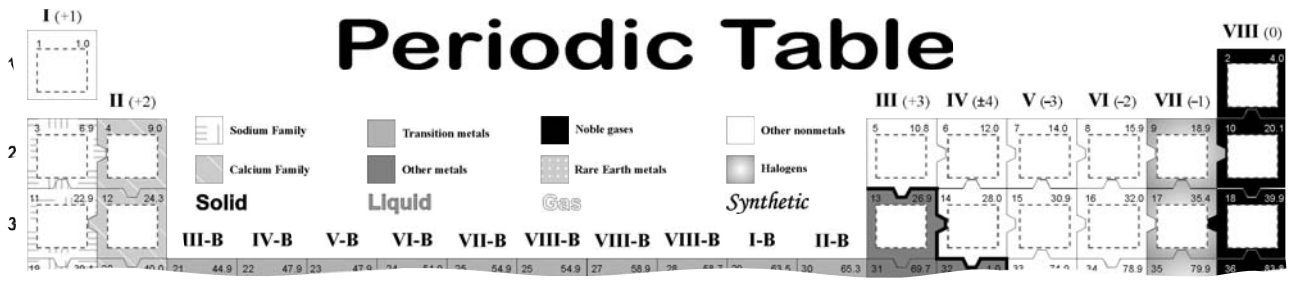
5. A family is a _____ of the periodic table.

6. The elements of the sodium family have a valence of: _____.
   (a) +1 (b) +2 (c) 0 (d) -1

7. The elements of the chlorine family have a valence of: _____.
   (a) +1 (b) 0 (c) +2 (d) –1

8-25. Using the Periodic Table of the Elements provided, arrange the symbols of the following elements in the table below to complete the first three periods of the periodic table:

8. argon (Ar)	13. fluorine (F)	18. neon (Ne)	23.sodium (Na)
9. beryllium (Be)	14. helium (He)	19. nitrogen (N)	24. sulfur (S)
10. boron (B)	15. hydrogen (H)	20. oxygen (O)	25. aluminum (Al)
11. carbon (C)	16. lithium (Li)	21. phosphorus (P)	
12. chlorine (Cl)	17. magnesium (Mg)	22. silicon (Si)	



26. The person who noticed that the Sun's spectrum was crossed by dark lines was: _____.
    (a) Isaac Newton
    (b) Joseph von Fraunhofer
    (c) William Kolher
    (d) Benjamin Franklin

27. One advantage of the Bunsen burner was that it produced a hot, steady flame.
    (a) True or (b) False

28. Lines in the spectrum can be bright or dark, depending upon the _____ of the background.

29. Cesium and rubidium were discovered by: _____.
    (a) their radioactivity
    (b) use of the spectroscope
    (c) utilizing the microscope
    (d) accident

30. A prism separates light into the colors by _____.

31. Dispersion is based on: _____.
    (a) constructive and destructive interference of light
    (b) differences in the index of refraction for different colors of light
    (c) principles alone
    (d) speed of the light

32. A diffraction grating produces colors of the rainbow by: _____.
    (a) rubbing them together
    (b) refraction of light
    (c) constructive and destructive interference of light
    (d) reflection of light

33. Modern spectroscopes spread light into the colors with _____ rather than prisms.

34. Argon is used in incandescent light bulbs because its produces a hot, blue light.
    (a) True or (b) False

35. The first commercial use of noble gases was: _____.
    (a) oxygen in welding
    (b) argon in light bulbs
    (c) helium in dirigible ships
    (d) neon is lighted signs

36. Cavendish caused nitrogen and oxygen to combine with one another by: _____.
    (a) chilling them to absolute zero
    (b) inhaling large quantities of them
    (c) heating them in the presence of nickel
    (d) sending an electric spark through the air

37. The prefix 'di' in diatomic means: _____.
    (a) heavy (b) two (c) colorless (d) one

38. The first noble gas discovered was: _____.
    (a) nitron (b) helium (c) argon (d) neon

39. The most common noble gas in the atmosphere of Earth is: _____.
(a) argon (b) radon (c) helium (d) neon

40. The noble gas that had been found first in the Sun was: _____.
(a) helium (b) krypton (c) argon (d) radon

41. The symbol for helium is _____.

42. The bends is caused by bubbles of _____ in the blood.

43. *Kr* is the symbol for _____.

44. The advantage of the orange-red light from krypton strobe lights is that:
_____.
(a) it is only visible with special glasses
(b) it penetrates haze and fog
(c) krypton for the lights is more abundant than other inert gases
(d) it is cheaper

45. *Ne* is the symbol for _____.

46. *Xe* is the symbol for _____.

47. The symbol for radon is _____.

48. The radioactive noble gas is _____.

49. The discovery of the noble family of gases destroyed the periodic table.
(a) True or (b) False

50. Neil Bartlett made a compound that contained xenon.
(a) True or (b) False

51. The most chemically active element known is: _____.
(a) radon (b) aluminum (c) fluorine (d) iodine

52. The _____ shell contains the electrons that take part in chemical reactions.

53-60. Write the valence below each element in this table:

Li	Be	B	C	N	O	F	Ne
___	___	___	___	___	___	___	___

61. During chemical reactions, _____ is likely to release an electron.
(a) chlorine (b) carbon (c) sodium (d) fluorine

62. Atoms that are held together by opposite static charges form _____ compounds.

63. _____ is an example of a covalent compound.

64. *"The important thing is not to stop _____."*

65. *"Life is not just an _____ based on random processes."*

66. *"Judge each day not by the _____ you reap, but by the seeds that you plant."*

67. *"The noblest exercise of the mind, within doors, and most befitting a person of quality, is _____."*

68. *"Ordinary people believe only in the possible. Extraordinary people visualize not what is possible or probable, but rather what is _____."*