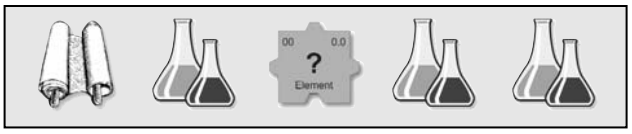
Name: _____

Date: _____ Grade: _____

SECTION QUIZ 3-3



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. The force of attraction of gravity between two bodies is directly proportional to the product of their _____.

2. Henry Cavendish was the first person to measure the force of gravity between two objects of ordinary size.
   (a) True or (b) False

3. Gravity is one of the _____ forces known in nature.

4. The most common liquid on Earth is: _____.
   (a) liquid hydrogen (b) mercury (c) petroleum (d) water

5. A hydrocarbon is a compound containing hydrogen and _____.

6. Breaking the water molecule apart with electricity is known as: _____.
   (a) electrolysis (c) spontaneous combustion
   (b) oxidation (d) electrical stimulation

7. A hydrogen atom contains one proton and: _____.
   (a) one electron (c) nothing more
   (b) one neutron (d) two electrons

8. The bubbles of gas released when soft drinks are opened are made of the gas: _____.
   (a) hydrogen (b) nitrogen (c) carbon dioxide (d) helium

9. Carbon dioxide will cause: _____.
   (a) flame to turn bluish in color
   (b) an ember to vanish
   (c) to smother a flame
   (d) a glowing ember to burst into flames

10. Oxygen is a gas that: _____.
    (a) is used to stop pain (c) smothers flames
    (b) has no effect on flames (d) supports combustion

11. Oxygen is abundant on Earth.
    (a) True or (b) False

12. Oxygen is chemically inert.
    (a) True or (b) False

13. Rusting and decay of organic matter is an example of _____ oxidation.

14. Electrolysis separates the water molecule into oxygen and: _____.
    (a) hydrogen (b) nitrogen (c) H_20 (d) helium

15. James Watt invented the: _____.
    (a) Dewar flask
    (b) steam engine
    (c) 'wattaburger'
    (d) Thermos bottle

16. The amount of heat needed to change water into steam is the latent heat of: _____.
    (a) fusion (b) vaporization (c) fission (d) condensation

17. A flame in a container of nitrogen will go out.
    (a) True or (b) False

18. The chemical symbol for nitrogen is _____.

19. The flow of heat by air currents is an example of _____.

20. Nitrogen is: _____.
    (a) highly active chemically (b) inert (c) inactive (d) bold

21. The chemical formula for ammonia is: _____.
    (a) *Am* (b) AN_3 (c) NH_3 (d) NO_3

22. For living things, the four most abundant elements are carbon, hydrogen, oxygen and _____.

23. Nitrogen-fixing bacteria can convert nitrogen from the atmosphere into chemical compounds.
    (a) True or (b) False

24. Nitrogen is essential to: _____.
    (a) plant life only
    (b) animal life only
    (c) both plant and animal life
    (d) neither plant nor animal life

25. The formula for potassium nitrate is: _____.
    (a) *KNi* (b) $C_3H_5(OH)_3$ (c) PO_4 (d) KNO_3

26. Most nitrogen fertilizers are manufactured by: _____.
    (a) the Haber Process
    (b) osmosis
    (c) electrolysis
    (d) rapid combustion

27. The explosive that produces great amounts of smoke when detonated is: _____.
    (a) guncotton (b) gunpowder (c) nitroglycerine (d) dynamite

SECTION QUIZ 3-3

28. Nitroglycerin is a: _____.
    (a) gas (b) liquid (c) solid (d) jelly

29. The blast from nitroglycerin is caused by hot gases that expand with great _____.

30. Alfred Nobel believed nitroglycerin: _____.
    (a) would lead to world domination
    (b) could only be used for bombs
    (c) might be useful for construction projects
    (d) might be used to make cars go faster

31. When nitroglycerin is absorbed in sticks of diatomaceous earth, the result is: _____.
    (a) dynamite (b) a heart medicine (c) guncotton (d) fertilizer

32. Two of the fields that Nobel recognized with his prizes are physics and: _____.
    (a) chemistry (b) mathematics (c) gourmet cooking (d) music

33. N_2O is the formula for: _____.
    (a) nitroglycerine (b) dinickel oxide (c) nitrous oxide (d) water

34. Humphry Davy discovered: _____.
    (a) angina pectoris (c) nitric acid
    (b) laughing gas (d) how to separate nitrogen from the soil

35. Humphry Davy's habit of sniffing and tasting new chemicals shortened his life.
    (a) True or (b) False

36. *"Defer no times, _____ have dangerous ends."*

37. *"This is an exciting world. It is cram-packed with _____. Great moments wait around every corner."*

38. *"Do not settle for second best when a little more _____ could make you a first class person."*

39. *"There is never a better measure of what a person is than what he does when he's absolutely free to _____."*

40. *"I make the most of all that comes and the least of all that _____."*