Name: _____

Date: _____ Grade: _____

SECTION QUIZ 11-2



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 2.5 points.

Fill in the blank or circle True or False

1. Silicon's ranking in abundance in the Earth's crust is: _____.
   (a) second (b) first (c) last (d) about middle

2. Silica is: _____.
   (a) clay and sand (b) carbon dioxide (c) silicon dioxide (d) soda ash

3. Sand is small crystals of _____.

4. The three ingredients that go into producing ordinary window glass are sand, _____ and soda ash.

5. Cobalt is added to glass to: _____.
   (a) give it a beautiful blue color
   (b) make it opaque
   (c) improve its optical properties for camera lenses
   (d) make it shatter resistant

6. _____ is a non-crystalline without a definite internal arrangement.

7. The four factors that determine the value of a gemstone are how it is presented, its rarity, beauty and _____.

8. The bandwidth capacity of a signal increases with _____.

9. Chemists build long silicon chains by alternating silicon atoms with _____ atoms.

10. Artificial heart valves are made of: _____.
    (a) quartz (b) ruby crystals (c) silicates (d) silicones

11. Water will dissolve silica or silicon dioxide better if the water is: _____ _____.
    (a) cold and at low pressure (c) hot and at normal atmospheric pressure
    (b) hot and at increased pressure (d) frozen at normal atmospheric pressure

12. Silicate gems include: _____.
    (a) diamond and emeralds (c) emerald and aquamarine
    (b) opal, agate, onyx and jasper (d) emery, sapphire and ruby

13. _____ ranks third in abundance in the Earth's crust.

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14. A _____ gem most nearly matches the chemical, physical and optical characteristics of a real gem.

15. A gem without flaws is mostly likely a _____ one.

16. The elements to the left of the zigzag line on a periodic chart are the: _____.
    (a) gases (b) neometals (c) metals (d) nonmetals

17. The chemical symbol *Al* is for _____.

18. The group of elements that gives up electrons during chemical reactions is: _____.
    (a) gases (b) inert elements (c) liquids (d) metals

19. Metals form bases with _____.

20. An example of a nonmetal is: _____.
    (a) aluminum (b) boron (c) gold (d) sodium

21. _____ can produce both mild acids and mild bases.

22. *Ga* is the chemical symbol for the element _____.

23. _____ is used in fire sprinkler systems.

24. _____ is used as a rat poison.

25. Iron is separated from its ore by: _____.
    (a) pounding (b) potassium (c) carbon (d) sulfuric acid

26. The chemist who discovered an inexpensive way to produce aluminum was: _____.
    (a) Charles Martin Hall (c) Friedrich Wohler
    (b) Isaac Newton (d) Humphry Davy

27. One of the reasons Friedrich Wohler was given credit for discovering aluminum is because: _____.
    (a) he discovered many of the important properties of aluminum
    (b) Napoleon insisted that Wohler be given credit
    (c) he discovered aluminum
    (d) Wohler was the friend of Humphry Davy

28. The top of the Washington Monument has a cap of: _____.
    (a) aluminum (b) gold (c) iron (d) wood

29. Charles Martin Hall discovered that aluminum oxide would dissolve in molten: _____.
    (a) carbonic acid (b) carbon (c) cryolite (d) potassium

30. Bauxite is an ore of: _____.
    (a) aluminum (b) iron (c) boron (d) uranium

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31. The color of _____ is the same color as aluminum.

32. The metal that is used in high-voltage, cross-country transmission lines is: _____.
    (a) aluminum (b) copper (c) silver (d) gold

33. Rather than become an eyesore, _____ is recycled.

34. Less than two percent of aluminum production comes from recycled aluminum.
    (a) True or (b) False

35. Aluminum _____ is used to purify water.

36. *"_____ is never an accident; it is always the result of intelligent effort."*

37. *"Like rough gemstones, we must submit to the shaping, grinding and polishing processes of life to bring forth our true beauty and _____."*

38. *"Success comes not by a single great leap, but by persistent small steps toward a _____."*

39. *"Chance favors only the _____ mind."*

40. *"Development of the _____ _____ enlightened man's understanding of the design of life as scientists identified and predicted existence of undiscovered elements."*