Name: _____

Date: _____ Grade: _____

SECTION QUIZ 1-3



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 2.1 points.

Use the following table to answer questions #1-5.

Type of Bond	How Formed	Example
Covalent	shared electrons	water and carbon dioxide
Ionic	gaining or losing electrons	sodium chloride

1. What type of bond is formed by gaining or losing electrons? _____
2. What type of bond is formed by shared electrons? _____
3. What is an example of an ionic bond? _____
4. Water and carbon dioxide are examples of ionic bonding. (a) True or (b) False
5. Sodium chloride is formed by shared electrons. (a) True or (b) False

Match the terms:

6. _____ compound
7. _____ molecule
8. _____ synthetic
9. _____ cohesion
10. _____ adhesion

(a) force of attraction between the same types of molecules
(b) a man-made substance such as Super Glue or Neoprene
(c) a substance formed when two or more elements combine chemically
(d) attraction force between different types of molecules
(e) smallest particle into which an element or compound can be divided

Multiple Choice: Choose the correct answer.

11. _____ are scientists who study matter and the changes that happen to it.
(a) Biologists (b) Geologists (c) Chemists (d) Dentists

12. What is a material that can hold substances together? _____
(a) proton (b) element (c) chemical (d) adhesive

13. Glues and tapes are types of _____.
(a) elements (b) adhesives (c) corrosives (d) none of these

14. Baking soda and baking powder are examples of _____ agents used in baking to make certain breads, cakes and cookies rise while baking.
(a) adhesive (b) corrosive (c) leavening (d) neutralizing

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SECTION QUIZ 1-3

Use the following table below to answer questions #15-19.

Chemical Reaction	Bases	Acids
What happens in water	releases hydroxide ions	hydrogen ions form
Taste	bitter	sour
Feel	slippery	no specific description
Litmus paper	turn red litmus to blue	turn blue litmus to red

15. An acid is a compound that releases hydroxide ions in water. (a) True or (b) False

16. Describe the taste of a base. _____

17. Describe the taste of an acid. _____

18. Which compound forms hydrogen ions in water? _____

19. Which compound turns red litmus to blue? _____

Match the terms:

20. _____ acid (a) pH reading of 7

21. _____ base (b) pH reading of 0-6

22. _____ neutral (c) pH reading of 8-14

Match the inventor with the invention:

23. _____ Spencer Silver and Arthur Fry (a) Silly Putty

24. _____ James Wright and Peter Hodgson (b) hair-care and skin products

25. _____ Madame C. J. Walker (c) Post-It Notes

True or False: Write the correct answer.

26. _____ Chemical formulas are combinations of symbols and numbers to identify what amounts of elements are used in compounds.

27. _____ Arthur Fry, Peter Hodgson and Madame Walker had in common the character qualities of creative thinking, resourcefulness and perseverance.

28. _____ Madame Walker did not give up or try or blame others for her circumstances. Through hard work and many trials this poor, orphaned girl became the first black woman millionaire.

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SECTION QUIZ 1-3

Complete the Life Principles.

29. *"Like many atoms, we can become more stable by losing _____ _____ and gaining positive ones."*
30. *"Every failure can be a _____ to something better."*
31. *"Formula for success: Study + Work + Preparation + _____."*
32. *"Beauty and _____ go hand in hand."*
33. *"Going out of your way to show _____ matters: 'what goes around, comes around'."*

Use the following table below to answer questions #34-35.

Glue Type	Made From	Works Best On
Super Glue	Plastic	Glass or Ceramics
White Glue	Water	Natural Fibers
Rubber Cement	Rubber	Most Materials

34. Which glue is made from plastic? _____
35. Which glue works best on natural fibers? _____

Use the following table below to answer questions #36-43.

Formula	Name	Subscript Explanation
$NaHCO_3$	sodium bicarbonate	3 atoms of oxygen
H_2O	water	2 atoms of hydrogen
CO_2	carbon dioxide	2 atoms of oxygen
H_2O_2	hydrogen peroxide	2 atoms of hydrogen and 2 atoms of oxygen
SO_2	sulfur dioxide	2 atoms of oxygen
NH_3	ammonia	3 atoms of hydrogen

36. How many atoms of oxygen are in sodium bicarbonate? _____
37. How many atoms of oxygen does sulfur dioxide have? _____
38. What is the formula for sulfur dioxide? _____
39. What is the name of H_2O? _____
40. How many atoms of hydrogen does H_2O have? _____
41. What is the formula for hydrogen peroxide? _____
42. How many atoms of oxygen does hydrogen peroxide have? _____
43. What is the name of CO_2? _____

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SECTION QUIZ 1-3

Use the following table below to answer questions #44-48.

Name of Synthetic Rubber	Date	Developed Uses
Neoprene	1931	hoses for pumping gasoline
Buna	1935	general purpose; tires
Butyl	1940	inner tubes in tires

44. Which synthetic rubber was used in tire inner tubes? _____

45. Which synthetic rubber was designated as the general-purpose rubber for the war effort and used mainly for tires? _____

46. Which synthetic rubber was used in hoses for pumping gasoline? _____

47. When was Neoprene developed? _____

48. When was Butyl developed? _____

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