**Chemistry**

**Unit 4 Assessment**

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Choose the correct answer.

1. A substance, considered acid has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ flavor.
2. Bitter.
3. Sweet.
4. Sour.
5. Bittersweet.
6. A substance with capacity to donate a proton when reacting with water is:
7. A base.
8. A salt.
9. An acid.
10. A hydronium.
11. A substance considered a base has a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ flavor.
12. bitter
13. sweet
14. sour
15. bittersweet
16. The process through which a molecule separates in ions when it is in contact with water is known as:
17. Electrification.
18. Ionization.
19. Dissociation.
20. Decomposition.
21. Sodium hydroxide (NaOH) is:
22. A base.
23. A salt.
24. An acid.
25. A hydroxil.
26. Arrhenius theory is quite adequate to explain behavior in water of:
27. Strong electrolites.
28. Light electrolites.
29. Neutral electrolites.
30. All kinds of electrolites.
31. The most probable pH value for an extremely acid solution is:
32. 2
33. 6
34. 7
35. 14
36. The most probable pH value for an extremely basic solution is:
37. 9
38. 3
39. 7
40. 14
41. pH is a scale that measures concentration of\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ions.
42. H+
43. OH+
44. OH-
45. H

\* is:and temperature, contain ts ments that form a molecule is:e when interacting with:ion is: is:and temperature, contain t

1. pH in a sodium bycarbonate at a concentration of 1 x 10-8 M (mole/L) is:
2. -8
3. -6
4. 6
5. 8
6. An acid is a substance that:
7. Transfers electrons.
8. Transfers protons.
9. Accepts protons.
10. Accepts electrons.
11. An ion element or molecule oxidizes if:
12. It gains electrons.
13. It loses electrons.
14. It gains protons.
15. It loses protons.
16. The raise in the oxidation number of an element means that:
17. It is reduced.
18. It is neutralized.
19. It is oxidized.
20. It is crystallized.
21. In the past, it was believed that elements, ions or molecules oxidize when interacting with:
22. O2
23. H2O
24. H3O+
25. O3
26. The oxidation number of each hydrogen atom in a water molecule is:
27. 1
28. -1
29. 2
30. -2
31. The oxidation number in the ion H3O+ is:
32. +2
33. +1
34. -1
35. -2
36. The oxidation number of an atom in its elemental form is:
37. 1
38. -1
39. 0
40. -2
41. The sum of the oxidation number of elements that form a molecule is:
42. 1
43. -1
44. 0
45. -2
46. Besides oxigen, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is produced in photosynthesis.
47. H2O
48. O2
49. C6H12O6
50. CH4
51. Besides carbon dioxide, \_\_\_\_\_\_\_\_\_\_\_\_\_ is produced in respiration.
52. H2O
53. O2
54. C6H12O6
55. CH4

Chemistry

Unit 4 Assessment Answer Key

1. c
2. c
3. a
4. c
5. a
6. b
7. a
8. d
9. c
10. d
11. b
12. b
13. c
14. c
15. a
16. b
17. c
18. c
19. c
20. a