

Chemistry Chapter 8 ~~Test~~

Retest

Multiple Choice

Identify the choice that best completes the statement or answers the question.

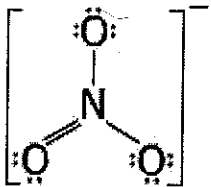
- ____ 1. Which covalent molecule has the strongest bond?
 a. A c. C
 b. B d. They are all equally strong
- ____ 2. Which is NOT a diatomic molecule?
 a. Fluorine c. Bromine
 b. Nitrogen d. Boron
- ____ 3. Which type of bond has one pair of electrons shared between atoms?
 a. single covalent c. double covalent
 b. coordinate covalent d. metallic
- ____ 4. How many single covalent bonds can carbon form?
 a. 1 c. 3
 b. 2 d. 4
- ____ 5. How many single covalent bonds can halogens form?
 a. 1 c. 3
 b. 2 d. 4

Element	Electronegativity	Element	Electronegativity
Carbon	2.55	Nitrogen	3.04
Oxygen	3.44	Phosphorous	2.19
Sulfur	2.58	Aluminum	1.61
Fluorine	3.98	Chlorine	3.16

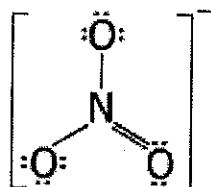
- ____ 6. What is the electronegativity difference in the compound Aluminum Chloride, $AlCl_3$?
 a. 4.77 c. 7.87
 b. 3.16 d. 1.55
- ____ 7. Which is the correct name for the compound N_2O_3 ?
 a. dinitro trioxide c. trinitrogen dioxide
 b. nitrogen (II) oxide (III) d. dinitrogen trioxide
- ____ 8. Which is the correct name for the compound PCl_5 ?
 a. monophosphorus tetrachloride c. phosphorus pentachloride
 b. phosphorus chloride d. pentaphosphorus chloride

- ___ 9. Which is the correct name for the compound N_2O_4 ?
- a. tetranitrogen dioxide c. dinitrogen quadoxide
b. dinitrogen tetroxide d. nitrogen oxide
- ___ 10. Which is the correct formula for the compound dinitrogen monoxide?
- a. NO_2 c. N_2O_1
b. $(NO)_2$ d. N_2O
- ___ 11. Which is the formula for the compound sulfur hexachloride?
- a. S_6Cl c. SCl_5
b. SCl_6 d. S_2Cl_3
- ___ 12. Which is the correct name for the compound $HClO_3$?
- a. hydrogen chlorate c. hydrogen chloride trioxide
b. chloric acid d. hydrochloric acid
- ___ 13. Which is the correct name for the compound HNO_2 ?
- a. hyponitrous acid c. nitrous acid
b. hydronitrogen dioxide d. hydronitric acid
- ___ 14. Which is the correct formula for the compound phosphoric acid?
- a. H_3P c. H_3PO_4
b. HPO_3 d. H_3PO_3
- ___ 15. Fluorine belongs to group 7A. How many covalent bonds are formed between two fluorine atoms?
- a. 1 c. 3
b. 2 d. 4
- ___ 16. Identify the correct structure of NO_3^- .

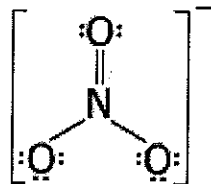
a.



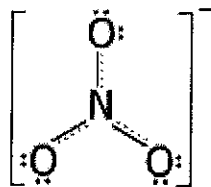
c.



b.



d.



Name: _____

ID: A

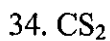
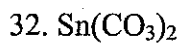
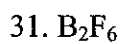
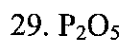
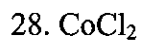
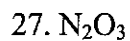
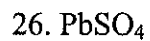
Completion

Complete each statement.

17. When a chemical bond is formed, the constituent atoms acquire the valence electron configuration of noble gases called _____.
18. In naming the compound PCl_5 , the prefix used with the second element is _____.
19. The second part of the name of the compound NF_3 is _____.
20. The name of the acid HI is _____ acid.
21. In _____ a greater amount of energy is required to break a bond in a reactants than is released when the new bonds form in the products
22. _____ is a process in which atomic orbitals mix and form new, identical hybrid orbitals.
23. Unequal sharing of electrons result in a _____ bond.
24. _____ is the property of a substance's ability to dissolve in another substance

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Name each of the following chemical compounds



Write the formulas of each of the following chemical compounds

36. lithium acetate

37. copper (I) oxide

38. ammonium phosphate

39. Calcium Sulfate

40. nitrogen tribromide

41. iron (II) fluoride

42. sulfur hexachloride

43. Tetraphosphorus deca-oxide

44. Arsenic Triiodide

45. Carbon Tetrachloride