

Naming and Formula Writing

Second Semester Study Guide (Part 1)

Name _____

Reviewing concepts for the final- Naming compounds writing formulas

Naming and formula writing- (originally from a Sem 1 final review)

- ____ 27. Which is the correct name for the compound N_2O_3 ?
- dinitro trioxide
 - nitrogen (II) oxide (III)
 - trinitrogen dioxide
 - dinitrogen trioxide
- ____ 28. Which is the correct name for the compound PCl_5 ?
- monophosphorus tetrachloride
 - phosphorus chloride
 - phosphorus pentachloride
 - pentaphosphorus chloride
- ____ 29. Which is the correct name for the compound N_2O_4 ?
- tetranitrogen dioxide
 - dinitrogen tetroxide
 - dinitrogen quadoxide
 - nitrogen oxide
- ____ 30. Which is the correct formula for the compound dinitrogen monoxide?
- NO_2
 - $(NO)_2$
 - N_2O_1
 - N_2O
- ____ 31. Which is the formula for the compound sulfur hexachloride?
- S_6Cl
 - SCl_6
 - SCl_5
 - S_2Cl_3
- ____ 32. Which is the correct name for the compound $HClO_3$?
- hydrogen chlorate
 - chloric acid
 - hydrogen chloride trioxide
 - hydrochloric acid
- ____ 33. Which is the correct name for the compound HNO_2 ?
- hyponitrous acid
 - hydronitrogen dioxide
 - nitrous acid
 - hydronitric acid
- ____ 34. Which is the correct formula for the compound phosphoric acid?
- H_3P
 - HPO_3
 - H_3PO_4
 - H_3PO_3
- ____ 35. The name of an oxyacid has the suffix *-ic* acid. What is the suffix of the oxyanion?
- ic*
 - ite*
 - ate*
 - ous*
- ____ 36. Which of the following is NOT a cation?
- iron(III) ion
 - sulfate
 - Ca^{2+}
 - mercurous ion
- ____ 37. An *-ate* or *-ite* at the end of a compound name usually indicates that the compound contains ____.
- fewer electrons than protons
 - neutral molecules
 - only two elements
 - a polyatomic anion
- ____ 38. Which of the following compounds contains the Mn^{3+} ion?
- MnS
 - $MnBr_2$
 - Mn_2O_3
 - MnO
- ____ 39. How are chemical formulas of binary ionic compounds generally written?
- cation on left, anion on right
 - anion on left, cation on right
 - Roman numeral first, then anion, then cation
 - subscripts first, then ions
- ____ 40. Which of the following formulas represents an ionic compound?
- CS_2
 - BaI_2
 - N_2O_4
 - PCl_3

103. Why is it necessary to use prefixes in naming covalent compounds?