

Quiz 2 - Nomenclature

Name _____

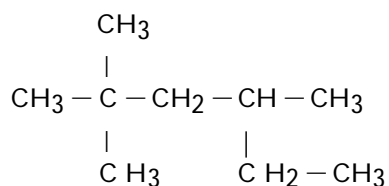
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Which one of the following compounds contains an ion with a 3+ charge? 1) _____
A) CuCl B) Na₂O C) KCl D) MgCl₂ E) FeCl₃
- 2) What is the correct formula for the oxide ion? 2) _____
A) O²⁺ B) O⁺ C) O³⁺ D) O E) O²⁻
- 3) The compound MgCl₂ is named _____. 3) _____
A) magnesium chloride B) magnesium dichloride
C) magnesium chlorine D) magnesium (II) chloride
- 4) Which one of the following elements forms two or more ions with different ionic charges? 4) _____
A) Zn B) Al C) Cd D) Ag E) Mn
- 5) Which of the following polyatomic ions has a positive charge? 5) _____
A) bicarbonate B) ammonium C) cyanide D) hydroxide
- 6) Which of the following polyatomic ions has a 3- ionic charge? 6) _____
A) phosphate B) hydroxide C) sulfate D) nitrate
- 7) What is the formula of the nitride ion? 7) _____
A) NO₃²⁻ B) NO₃³⁻ C) NO₂⁻ D) N³⁻ E) NO₂⁻
- 8) The name of the HSO₄⁻ ion is _____. 8) _____
A) hydrogen sulfate or bisulfate B) hydrogen sulfite
C) sulfate D) bisulfite
- 9) What is the formula of the ionic compound that contains sodium and phosphate ions? 9) _____
A) Na₃P B) Na₃PO₄ C) NaPO₄ D) Na₃PO₃ E) Na₂PO₃
- 10) Fe₂(SO₄)₃ is called _____. 10) _____
A) diiron trisulfate B) iron (II) sulfate C) iron sulfate D) iron (III) sulfate
- 11) What is the formula for aluminum nitrite? 11) _____
A) AlNO₃ B) Al₂(NO₂)₂ C) Al(NO₂)₃ D) Al₂(NO₃)₃
- 12) The correct formula for copper (II) chloride is _____. 12) _____
A) CuCl₄ B) Cu₂Cl₂ C) Cu₂Cl₄ D) CuCl₂ E) Cu₂Cl
- 13) The correct formula for the ionic compound formed between chromic and sulfate ions is: 13) _____
A) Cr₃(SO₄)₂ B) (Cr)₂(SO₄)₃ C) Cr₂(SO₄)₃ D) (Cr₂)(SO₄)₃

- 14) The correct name for FeS is _____.
 A) iron(III) sulfite B) ferrous sulfite C) ferric sulfide D) iron(II) sulfide 14) _____
- 15) The correct name for SnCl₂ is _____.
 A) antimony(II) chloride B) tin(II) chloride
 C) antimony dichloride D) tin chloride 15) _____
- 16) Ammonium carbonate has the formula shown below.
 A) NH₄(CO₃)₂ B) NH₄CO₃ C) (NH₄)₂(CO₃)₂ D) (NH₄)₂CO₃ 16) _____
- 17) Ammonium hydrogen phosphate has the following formula.
 A) NH₄PO₄ B) (NH₄)₃PO₄ C) NH₄HPO₄ D) (NH₄)₂HPO₄ 17) _____
- 18) Calcium bicarbonate has the following formula.
 A) Ca(HCO₃)₂ B) CaCO₃ C) CaHCO₃ D) Ca₂HCO₃ 18) _____
- 19) The formula for the compound formed between calcium and sulfate ion is which of these?
 A) CaSO₄ B) Ca₂(SO₄)₂ C) (Ca)₂SO₄ D) Ca(SO₄)₂ 19) _____
- 20) Iron(III) sulfite has this formula.
 A) (Fe)₂SO₃ B) Fe₂SO₃ C) Fe(SO₃)₃ D) Fe₂(SO₃)₃ 20) _____
- 21) Lead(II) iodide has the following formula.
 A) PbI₂ B) Pb₂I C) Pb₂I₃ D) Pb₂I₂ E) PbI 21) _____
- 22) The correct name for CaSO₄ is _____.
 A) calcium sulfide B) sulfate calcium C) calcium sulfate D) calcium sulfite 22) _____
- 23) Give the correct name for FePO₄.
 A) iron(II) phosphate B) iron phosphate
 C) iron phosphite D) iron(III) phosphate 23) _____
- 24) Potassium phosphide has the following formula.
 A) KP₃ B) K₃PO₄ C) K₃P D) KPO₄ E) KP 24) _____
- 25) The correct formula for dinitrogen trioxide is _____.
 A) N₂O B) N₂O₂ C) N₃O₂ D) N₂O₃ E) NO₃ 25) _____
- 26) The formula for sulfur dichloride is _____.
 A) SCl₂ B) S₄Cl₂ C) S₂Cl₂ D) SCl E) S₂Cl 26) _____
- 27) The correct name for CS₂ is _____.
 A) monocarbon disulfide B) carbon disulfide
 C) monocarbon sulfide D) carbon sulfide 27) _____

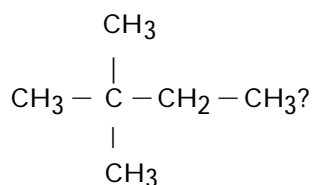
28) What is the name of the alkyl group CH₃-CH₂-CH₂-? 28) _____
A) ethyl B) ethane C) isopropyl D) propyl E) propane

29) What is the IUPAC name of this alkane? 29) _____



- A) 2,2,4-trimethylhexane B) 2-ethyl-4,4-dimethylpentane
C) 3,5,5-trimethylhexane D) 2-ethyl-2,2-dimethylpentane

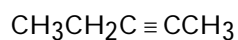
30) What is the name of the following compound: 30) _____



- A) 2-dimethylbutane B) dimethylbutane
C) 2,2-dimethylbutane D) 3,3-dimethylbutane

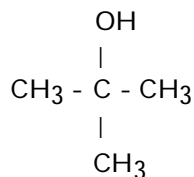
31) The functional group contained in the compound CH₃CH₂COOH is a(n) _____. 31) _____
A) carboxylic acid B) aldehyde C) alcohol D) ketone

32) What is the name of the following compound: 32) _____



- A) 3-pentyne B) pentyne
C) 2-pentyne D) 1-methylbutyne

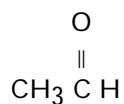
33) What is the name of the following compound: 33) _____



- A) 2-methyl-2-propanol B) butanol
C) 2-propanol D) 2-methylbutanol

34) What is the name of the following compound:

34) _____

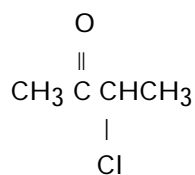


- A) 1-ethanaldehyde
C) methanal

- B) 1-ethanone
D) ethanal

35) What is the name of the following compound:

35) _____



- A) chloro propyl ketone
C) 2-chloro-3-butanone

- B) 3-chloro-2-butanone
D) 2-chloro-3-ketone butane

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

36) In a 1.987 mg sample of zinc nitride there are how many nitrogen atoms?

36) _____

37) How many μmol s of nitrogen are in a 0.09734 mg sample of lanthanum(III) nitrate?

37) _____

38) Draw the structure of 2,2,3,4-tetramethyl-1-pentanol.

38) _____

39) Draw the structure of 2,4-dimethyl-5-propyldecanoic acid.

39) _____