

Name _____

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

- 1) What is the formula for an ionic compound made of barium and nitrogen?
- 2) What is the formula for an ionic compound made of magnesium and sulfur?
- 3) The formula for potassium chlorate is KClO_3 . The formula for magnesium chloride is MgCl_2 . What is the formula for magnesium chlorate?
- 4) What is the formula for an ionic compound made of aluminum and oxygen?
- 5) What is the name of the ionic compound made of beryllium and chlorine?
- 6) What is the name of the compound made from lithium and oxygen?
- 7) What is the name of CoS ?
- 8) What is the name of $\text{Ca}(\text{NO}_3)_2$?
- 9) Choose the pair of names and formulas that do not match.
- 10) How many of each type of atom are there in the formula $\text{Ca}_3(\text{PO}_4)_2$?

MATCHING. Choose the item in column 2 that best matches each item in column 1.

Match the correct name of the polyatomic ions with the formulas given.

11) NO_3^-

A) nitrate



A) carbonate



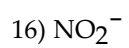
B) carbonite



C) sulfate



D) sulfite



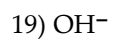
E) phosphate



F) phosphite



G) nitrite



H) bicarbonate

I) bisulfate

J) bisulfite

K) hydroxide

L) oxide

Give the correct charge for ions of the following elements.

20) Ca

A) 2+

21) Cl

B) 1-

22) O

C) 2-

23) Al

D) 3+

24) K

E) 1+

F) 0

Match the chemical name with the correct formula.

25) magnesium sulfate

A) MgSO_4

26) magnesium hydrogen sulfate

B) $\text{Mg}(\text{HSO}_4)_2$

27) magnesium sulfide

C) MgS

28) magnesium sulfite

D) MgSO_3

29) magnesium hydrogen sulfite

E) $\text{Mg}(\text{HSO}_3)_2$

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

30) Write the formula for calcium iodide.

31) Write the name of MgCO_3 .

32) Write the name of CuSO_4 .

33) What is the name of K_3PO_4 ?

34) What is the name of LiCl ?

35) What is the name of Cr_2O_3 ?

36) What is the name of NiCO_3 ?

37) NaHCO_3 is called _____.

38) Al_2O_3 is called _____.

39) Iron(III) oxide has the formula _____.

40) Gold(I) iodide has the following formula.

41) The formula for barium chloride is _____.

Answer Key

Testname: IONIC BONDING_REVIEW

- 1) Ba_3N_2
- 2) MgS
- 3) $\text{Mg}(\text{ClO}_3)_2$
- 4) Al_2O_3
- 5) beryllium chloride
- 6) lithium oxide
- 7) cobalt(II) sulfide
- 8) calcium nitrate
- 9) magnesium nitrite: $\text{Mg}(\text{NO}_2)_3$
- 10) Ca = 3, P = 2, O = 8
- 11) A
- 12) A
- 13) C
- 14) D
- 15) E
- 16) G
- 17) H
- 18) I
- 19) K
- 20) A
- 21) B
- 22) C
- 23) D
- 24) E
- 25) A
- 26) B
- 27) C
- 28) D
- 29) E
- 30) CaI_2
- 31) magnesium carbonate
- 32) copper(II) sulfate
- 33) potassium phosphate
- 34) lithium chloride
- 35) chromium(III) oxide
- 36) nickel(II) carbonate
- 37) sodium hydrogen carbonate or sodium bicarbonate
- 38) aluminum oxide
- 39) Fe_2O_3
- 40) AuI
- 41) BaCl_2