

Name: _____

Score: / 100

Henrico County Public Schools

Unit 5 Test Review - Ions and Chemical Bonding

Jennifer Krug

Question 1

Choose the correct name for: Cu_2S

- ☐ copper sulfide
- ☐ copper I sulfide
- ☐ dicopper sulfide
- ☐ copper II sulfide

Name: _____

Question 2

Choose the correct name for: N_2O

- ☐ nitrogen II oxide
- ☐ mononitrogen dioxide
- ☐ nitrogen II oxate
- ☐ dinitrogen monoxide

Question 3

Choose the correct formula for: zinc phosphide

- ☐ Zn_3P
- ☐ Zn_2P
- ☐ Zn_3P_2
- ☐ ZnP_3

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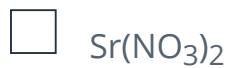
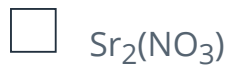
Question 4

Choose the correct formula for: methane



Question 5

Choose the correct formula for: strontium nitrate



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Question 6

Choose the correct formula for: sodium sulfide



Question 7

Choose the correct formula for: oxygen gas



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Question 8

Choose the correct formula for: titanium III phosphate

☐ Ti_3P

☐ Ti_3PO_4

☐ TiP

☐ TiPO_4

Question 9

Choose the correct name for: PbO

☐ lead III oxide

☐ lead II oxide

☐ lead IV oxide

☐ lead I oxide

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Question 10

Choose the correct name for: FeCO_3

- ☐ iron III carbonate
- ☐ iron carbonide
- ☐ iron II carbonate
- ☐ iron carbonate

Question 11

Match the appropriate oxidation number to each polyatomic ion.

- | | |
|---|-------|
| ☐ 1. OH | A. -2 |
| ☐ 2. NO_3 | B. -3 |
| ☐ 3. NH_4 | C. +2 |
| ☐ 4. SO_4 | D. +3 |
| ☐ 5. PO_4 | E. +1 |
| ☐ 6. CO_3 | F. -1 |

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Question 12

Choose the correct formula for: ammonium oxide

☐ NH_4O

☐ Am_2O

☐ $(\text{NH}_4)_2\text{O}$

☐ AmO

Question 13

Choose the correct name for: Ag_2SO_4

☐ argon sulfide

☐ silver sulfate

☐ argon sulfate

☐ silver sulfide

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Question 14

Choose the correct name for: Na_3P

- ☐ sodium phosphide
- ☐ sodium phosphate
- ☐ sodium phoshporus
- ☐ trisodium phosphate

Question 15

Ionic bonding occurs when

- ☐ a metal transfers an electron to a nonmetal
- ☐ a metal and a nonmetal share electrons
- ☐ one nonmetal transfers an electron to another nonmetal
- ☐ two nonmetals share electrons

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Question 16

Choose the correct name for: NH_3

- ☐ methane
- ☐ ammonium
- ☐ nitrate
- ☐ ammonia

Question 17

Choose the correct formula for: dinitrogen tetrachloride

- ☐ N_2C_4
- ☐ N_2Cl_4
- ☐ $4 \text{N}_2\text{Cl}$
- ☐ 2NCl_4

Name: _____

Question 18

Choose the correct name for: Ca(OH)_2

- ☐ calcium oxalate
- ☐ calcium oxide
- ☐ calcium peroxide
- ☐ calcium hydroxide

Question 19

Choose the correct name for: AuNO_3

- ☐ gold I nitrogenate
- ☐ gold III nitrate
- ☐ gold III nitrogenate
- ☐ gold I nitrate

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Question 20

How many atoms are in the formula for ammonium oxide?

☐ 10

☐ 11

☐ 8

☐ 12

Question 21

Choose the correct formula for: lead IV phosphate

☐ $\text{Pb}_3(\text{PO}_4)_4$

☐ $\text{Pb}_2(\text{PO}_3)_4$

☐ $\text{Pb}(\text{PO}_4)_4$

☐ $\text{Pb}_4(\text{PO}_4)_3$

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Question 22

Choose the correct formula for: chromium III oxide

☐ Cr_2O_3

☐ Cr_3O_2

☐ CrO_3

☐ Cr_3O

Question 23

Choose the correct name for: N_2

☐ nitride

☐ dinitrogen gas

☐ nitrate

☐ nitrogen gas

Name: _____

Question 24

Match the appropriate oxidation number to each ion.

- | | |
|--|-------|
| ☐ 1. lithium ion | A. +4 |
| ☐ 2. calcium ion | B. +2 |
| ☐ 3. nitride ion | C. -4 |
| ☐ 4. sulfide ion | D. +1 |
| ☐ 5. chloride ion | E. +3 |
| ☐ 6. silver ion | F. -2 |
| | G. -3 |
| | H. -1 |

Question 25

An element in the Halogen Group will have ___ valence electrons.

- ☐ 18
- ☐ 17
- ☐ 7
- ☐ 1