

Nomenclature Practice – CHM151

1. Check all of the examples below that are ionic compounds:

- a) AgI b) CuSO₄ c) NO₂ d) KNO₃ e) Mg(OH)₂
f) FeP g) C₂H₂ h) HCl i) CaO j) SO₃

2. Check all of the examples below that are molecular compounds:

- a) HI b) BaSO₄ c) LiNO₂ d) HNO₃ e) Al(OH)₃
f) Ni₃PO₄ g) N₂H₄ h) HBr i) MgO j) K₂SO₃

3. Check all of the examples below that are ionic compounds:

- a) CuI b) H₂SO₄ c) NaNO₂ d) CCl₄ e) KOH
f) NH₃ g) SF₆ h) HBr i) TiS₂ j) LiMnO₄

4. Check all of the examples below that are molecular compounds:

- a) TiO₂ b) HI c) HNO₂ d) NaNO₃ e) FeCl₃
f) H₃PO₄ g) NaN₃ h) KBr i) CaO j) CBr₄

Name the following compounds:

- | | |
|---|---|
| 5. KOH | 6. LiMnO ₄ |
| 7. SF ₆ | 8. FeCl ₃ |
| 9. NaNO ₃ | 10. Al ₂ S ₃ |
| 11. P ₂ O ₅ | 12. HCl (aq) |
| 13. BaSO ₄ | 14. PbCO ₃ |
| 15. Mg(OH) ₂ | 16. H ₃ PO ₄ (aq) |
| 17. Ni(CN) ₂ | 18. HNO ₃ (aq) |
| 19. CoCl ₃ | 20. ZnCrO ₄ |
| 21. SnS ₂ | 22. NF ₃ |
| 23. AgCl | 24. H ₂ SO ₄ (aq) |
| 25. FeN | 26. CdCO ₃ |
| 27. CF ₄ | 28. Na ₂ S |
| 29. H ₂ CO ₃ (aq) | 30. AgNO ₃ |

Give the chemical formula corresponding to the compound names below:

- | | |
|--------------------------|-----------------------------|
| 1. iron(III) phosphate | 2. strontium iodide |
| 3. aluminum sulfate | 4. cadmium chromate |
| 5. carbonic acid | 6. mercury(II) cyanide |
| 7. ammonium phosphate | 8. zinc acetate |
| 9. lead(IV) permanganate | 10. dinitrogen oxide |
| 11. barium sulfate | 12. chromium(III) phosphide |
| 13. nickel(III) nitrite | 14. sulfurous acid |

15. lithium carbonate

17. silver chromate

19. iron(III) phosphide

21. potassium cyanide

23. manganese(II) sulfide

25. hydrofluoric acid

16. bromine trifluoride

18. copper(I) oxide

20. hydrochloric acid

22. sodium hydroxide

24. aluminum phosphide

26. Fill in the blanks below with chemical formulas:

a) iron(III) bromide: _____

c) sulfuric acid: _____

e) copper(II) oxide: _____

b) silver nitrate: _____

d) carbon tetrafluoride: _____

27. Fill in the blanks below with chemical formulas:

a) cobalt(III) nitrate: _____

c) nitric acid: _____

e) lead(II) sulfide: _____

b) sodium hydroxide: _____

d) phosphorus trichloride: _____

28. Fill in the blanks below with chemical formulas:

a) aluminum carbonate: _____

c) phosphoric acid: _____

e) barium chloride: _____

b) magnesium chromate: _____

d) zinc cyanide: _____

29. Fill in the blanks below with chemical formulas:

a) manganese (II) sulfite: _____

c) acetic acid: _____

e) sulfur hexafluoride: _____

b) lithium phosphide: _____

d) cadmium chloride: _____

30. Fill in the blanks below with chemical formulas:

a) tin(IV) oxide: _____

c) sulfurous acid: _____

e) nitrogen tribromide: _____

b) calcium nitride: _____

d) potassium acetate: _____