

Ionic Compound Formula Writing Worksheet

[BEST CHEMISTRY CALCULATORS](#)

INTRODUCTION

Ionic compounds are formed when metals transfer electrons to nonmetals, resulting in the formation of positively charged cations and negatively charged anions. These oppositely charged ions come together to form neutral ionic compounds. The formula of an ionic compound represents the simplest ratio of the ions involved.

QUESTIONS:

NAMES AND FORMULAS FOR IONIC COMPOUNDS

Given the following ionic formulas, write out the compound's name:

1. NaCl: _____
2. CaBr₂: _____
3. Fe₂O₃: _____
4. Al₂(SO₄)₃: _____
5. K₂CO₃: _____
6. Cu(NO₃)₂: _____
7. MgO: _____
8. ZnCl₂: _____
9. Ag₂S: _____
10. PbO₂: _____
11. Ba₃(PO₄)₂: _____
12. Li₃N: _____
13. CaF₂: _____
14. AlCl₃: _____
15. Fe(NO₃)₃: _____
16. KBr: _____
17. Cu₂O: _____
18. Na₂S: _____
19. MgCl₂: _____
20. ZnO: _____
21. CaO: _____
22. Na₃PO₄: _____
23. K₂O: _____
24. Al₂O₃: _____
25. CuSO₄: _____
26. NH₄Cl: _____
27. Mg₃(PO₄)₂: _____

28. FeCl₃: _____
29. Na₂CO₃: _____
30. K₂SO₄: _____

Given the following compound names, write out the ionic formula:

1. Sodium bromide: _____
2. Calcium iodide: _____
3. Iron(II) sulfate: _____
4. Aluminum nitrate: _____
5. Potassium phosphate: _____
6. Copper(I) chloride: _____
7. Magnesium nitride: _____
8. Zinc fluoride: _____
9. Silver oxide: _____
10. Lead(IV) sulfide: _____
11. Barium nitrate: _____
12. Lithium sulfate: _____
13. Calcium carbonate: _____
14. Aluminum hydroxide: _____
15. Iron(III) bromide: _____
16. Potassium iodide: _____
17. Copper(II) oxide: _____
18. Sodium sulfide: _____
19. Magnesium bromide: _____
20. Zinc sulfate: _____
21. Calcium chloride: _____
22. Sodium acetate: _____
23. Potassium nitride: _____
24. Aluminum phosphate: _____
25. Copper(II) carbonate: _____
26. Ammonium oxide: _____
27. Magnesium hydroxide: _____
28. Iron(II) chloride: _____
29. Sodium bicarbonate: _____
30. Potassium perchlorate: _____

ANSWERS NAMES AND FORMULAS FOR IONIC COMPOUNDS

Given the following ionic formulas, write out the compound's name:

1. NaCl: Sodium Chloride
2. CaBr₂: Calcium Bromide
3. Fe₂O₃: Iron(III) Oxide
4. Al₂(SO₄)₃: Aluminum Sulfate
5. K₂CO₃: Potassium Carbonate
6. Cu(NO₃)₂: Copper(II) Nitrate
7. MgO: Magnesium Oxide
8. ZnCl₂: Zinc Chloride
9. Ag₂S: Silver Sulfide
10. PbO₂: Lead(IV) Oxide
11. Ba₃(PO₄)₂: Barium Phosphate
12. Li₃N: Lithium Nitride
13. CaF₂: Calcium Fluoride
14. AlCl₃: Aluminum Chloride
15. Fe(NO₃)₃: Iron(III) Nitrate
16. KBr: Potassium Bromide
17. Cu₂O: Copper(I) Oxide
18. Na₂S: Sodium Sulfide
19. MgCl₂: Magnesium Chloride
20. ZnO: Zinc Oxide
21. CaO: Calcium Oxide
22. Na₃PO₄: Sodium Phosphate
23. K₂O: Potassium Oxide
24. Al₂O₃: Aluminum Oxide
25. CuSO₄: Copper(II) Sulfate
26. NH₄Cl: Ammonium Chloride
27. Mg₃(PO₄)₂: Magnesium Phosphate
28. FeCl₃: Iron(III) Chloride
29. Na₂CO₃: Sodium Carbonate
30. K₂SO₄: Potassium Sulfate

Given the following compound names, write out the ionic formula:

1. Sodium bromide: NaBr
2. Calcium iodide: CaI₂
3. Iron(II) sulfate: FeSO₄
4. Aluminum nitrate: Al(NO₃)₃
5. Potassium phosphate: K₃PO₄
6. Copper(I) chloride: CuCl
7. Magnesium nitride: Mg₃N₂
8. Zinc fluoride: ZnF₂

9. Silver oxide: Ag_2O
10. Lead(IV) sulfide: PbS_2
11. Barium nitrate: $\text{Ba}(\text{NO}_3)_2$
12. Lithium sulfate: Li_2SO_4
13. Calcium carbonate: CaCO_3
14. Aluminum hydroxide: $\text{Al}(\text{OH})_3$
15. Iron(III) bromide: FeBr_3
16. Potassium iodide: KI
17. Copper(II) oxide: CuO
18. Sodium sulfide: Na_2S
19. Magnesium bromide: MgBr_2
20. Zinc sulfate: ZnSO_4
21. Calcium chloride: CaCl_2
22. Sodium acetate: $\text{NaC}_2\text{H}_3\text{O}_2$
23. Potassium nitride: K_3N
24. Aluminum phosphate: AlPO_4
25. Copper(II) carbonate: CuCO_3
26. Ammonium oxide: $(\text{NH}_4)_2\text{O}$
27. Magnesium hydroxide: $\text{Mg}(\text{OH})_2$
28. Iron(II) chloride: FeCl_2
29. Sodium bicarbonate: NaHCO_3
30. Potassium perchlorate: KClO_4