

Write formulas for ionic compounds made from the following ions. Use your ion cutouts to help determine the correct ratio of ions.

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| 1. Ca^{2+} and Cl^- _____ | 6. Cu^+ and N^{3-} _____ |
| 2. Mn^{3+} and O^{2-} _____ | 7. Co^{2+} and P^{3-} _____ |
| 3. Al^{3+} and S^{2-} _____ | 8. K^+ and S^{2-} _____ |
| 4. Li^+ and Br^- _____ | 9. Sr^{2+} and O^{2-} _____ |
| 5. Ba^{2+} and F^- _____ | 10. Cr^{6+} and O^{2-} _____ |

Use your periodic table to predict the ionic compounds made from the following elements. Hint: first determine the most likely charge on each element when it either gains or loses electrons.

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| 11. Na and Cl _____ | 16. Ga and S _____ |
| 12. Mg and Br _____ | 17. Rb and F _____ |
| 13. Al and O _____ | 18. Li and Se _____ |
| 14. Cs and As _____ | 19. Be and P _____ |
| 15. Ca and I _____ | 20. Sr and N _____ |

Write formulas for each ionic compound named below.

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| 21. Sodium oxide _____ | 26. Copper (II) oxide _____ |
| 22. Strontium fluoride _____ | 27. Iron (III) chloride _____ |
| 23. Lithium sulfide _____ | 28. Zinc sulfide _____ |
| 24. Aluminum nitride _____ | 29. Nickel (III) bromide _____ |
| 25. Potassium selenide _____ | 30. Titanium (IV) oxide _____ |

Name each ionic compound from the formulas given below.

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| 31. CaCl_2 _____ | 40. Al_2O_3 _____ |
| 32. MgBr_2 _____ | 41. CoCl_2 _____ |
| 33. Li_2O _____ | 42. CuO _____ |
| 34. NaI _____ | 43. ZnCl_2 _____ |
| 35. SrF_2 _____ | 44. HgO _____ |
| 36. PbO_2 _____ | 45. Na_3As _____ |
| 37. MgCl_2 _____ | 46. Fe_2O_3 _____ |
| 38. NiCl_3 _____ | 47. SnO_2 _____ |
| 39. KI _____ | 48. BaF_2 _____ |