



Unit 2B Study Guide: Nomenclature

1. How do you know what type of compound it is by looking at its **name**?

Type I Binary metal + nonmetal	Type II Binary transition metal + nonmetal : Roman numerals	Type III 2 nonmetals & prefixes	Binary Acid uses hydro says acid
Type I Tertiary metal + polyatomic ion	Type II Tertiary transition metal + polyatomic ion : Roman numerals	X	Oxyacid says acid does NOT use hydro

2. How do you know what type of compound it is by looking at its **formula**?

Type I Binary metal + nonmetal	Type II Binary transition metal + nonmetal	Type III 2 nonmetals	Binary Acid H is 1 st element + no oxygen
Type I Tertiary metal + polyatomic ion	Type II Tertiary transition metal + polyatomic ion	X	Oxyacid H is 1 st element + polyatomic ion containing oxygen

NOMENCLATURE - MIXED REVIEW

1. carbon tetrachloride	<u>C_{Cl}₄</u>	26. CaCO ₃	<u>calcium carbonate</u>
2. mercury(II) oxide	<u>HgO</u>	27. Li ₂ S	<u>lithium sulfide</u>
3. potassium chlorate	<u>KClO₃</u>	28. HI	<u>hydroiodic acid</u>
4. hydrobromic acid	<u>HBr</u>	29. Tl(NO ₃) ₃	<u>thallium nitrate</u>
5. sodium hydroxide	<u>NaOH</u>	30. NH ₄ NO ₃	<u>ammonium nitrate</u>
6. copper(I) dichromate	<u>Cu₂Cr₂O₇</u>	31. Cu(ClO ₄) ₂	<u>copper (II) perchlorate</u>
7. boron trifluoride	<u>BF₃</u>	32. H ₃ PO ₄	<u>phosphoric acid</u>
8. phosphorous acid	<u>H₃PO₃</u>	33. S ₂ O ₅	<u>disulfur pentoxide</u>
9. aluminum sulfate	<u>Al₂(SO₄)₃</u>	34. Rb ₂ Cr ₂ O ₇	<u>rubidium dichromate</u>
10. copper(I) nitrate	<u>Cu(NO₃)₂</u>	35. KMnO ₄	<u>potassium permanganate</u>
11. sodium phosphate	<u>Na₃PO₄</u>	36. Cu(NO ₃) ₂	<u>copper (II) nitrate</u>
12. mercury(II) peroxide	<u>Hg(O₂)₂</u>	37. Ni(OH) ₂	<u>nickel (II) hydroxide</u>
13. aluminum hydroxide	<u>Al(OH)₃</u>	38. XeCl ₂	<u>xenon dichloride</u>
14. sulfuric acid	<u>H₂SO₄</u>	39. (NH ₄) ₂ SO ₄	<u>ammonium sulfate</u>
15. lead (II) carbonate	<u>PbCO₃</u>	40. PbCl ₂	<u>lead (II) chloride</u>
16. sodium chromate	<u>Na₂CrO₄</u>	41. HCN	<u>hydrcyanic acid</u>
17. silicon dioxide	<u>SiO₂</u>	42. Fe ₃ (PO ₄) ₂	<u>iron (III) phosphate</u>
18. barium chloride	<u>BaCl₂</u>	43. AgNO ₃	<u>silver (I) nitrate</u>
19. nickel(II) phosphate	<u>Ni₃(PO₄)₂</u>	44. HClO ₃	<u>chloric acid</u>
20. copper(II) acetate	<u>Cu(C₂H₃O₂)₂</u>	45. N ₂ O ₅	<u>dinitrogen pentoxide</u>
21. chlorous acid	<u>HClO₂</u>	46. AlCl ₃	<u>aluminum chloride</u>
22. iodine pentafluoride	<u>IF₅</u>	47. TiCl ₄	<u>titanium (IV) chloride</u>
23. tin(IV) sulfate	<u>Sn(SO₄)₂</u>	48. Cr ₂ (SO ₃) ₃	<u>chromium (III) sulfite</u>
24. chromium(III) oxide	<u>Cr₂O₃</u>	49. KOH	<u>potassium hydroxide</u>
25. lithium iodide	<u>LiI</u>	50. CBr ₄	<u>carbon tetrabromide</u>