NOMENCLATURE SET 1 A IONIC COMPOUNDS Provide the matching name or formula for the following ionic compounds.

1. Nal	<u>.</u>	2. calcium bromide	_
3. AIP	<u>.</u>	4. sodium oxide	<u>.</u>
5. RaCl ₂	<u>.</u>	6. aluminum iodide	<u>.</u>
7. KF	<u>.</u>	8. barium chloride	<u>.</u>
9. ZnS	<u>.</u>	10. beryllium chloride	<u>.</u>
11. BF ₃	<u>.</u>	12. francium sulfide	<u>.</u>
13. AIN	<u>.</u>	14. hydrogen fluoride	<u>.</u>
15. Ag ₂ S	<u>.</u>	16. potassium iodide	<u>.</u>
17. Li ₃ N	<u>.</u>	18. magnesium fluoride	_
19. Be ₃ N ₂	<u>.</u>		

Covalent Provide the matching name or formula for the following molecules (prefixes!)

1. SO ₂	<u>.</u>	2. carbon monoxide
3. PF ₃	<u>.</u>	4. sulfur hexachloride
5. CCl ₄		6. diarsenic trisulfide
7. CO ₂	<u>.</u>	8. carbon tetrafluoride
9. Cl ₂ O		10. dihydrogen oxide
11. NO ₂		12. oxygen difluoride
13. NO		14. arsenic pentaiodide
		15. iodine heptafluoride

NOMENCLATURE SET 1 B IONIC COMPOUNDS Provide the matching name or formula for the following ionic compounds.

1. sodium iodide	<u>.</u>	2. CaBr ₂	<u>.</u>
3. aluminum phosphide	<u>.</u>	4. Na ₂ O	<u>.</u>
5. radium chloride	<u>.</u>	6. AlI ₃	<u>.</u>
7. potassium fluoride	<u>.</u>	8. BaCl ₂	<u>.</u>
9. zinc sulfide	<u>.</u>	10. BeCl ₂	<u>.</u>
11. boron fluoride	<u>.</u>	12. Fr ₂ S	<u>.</u>
13. aluminum nitride	<u>.</u>	14. HF	<u>.</u>
15. silver sulfide	<u>.</u>	16. KI	<u>.</u>
17. lithium nitride		18. MgF ₂	<u>.</u>
19. beryllium nitride			

Covalent Provide the matching name or formula for the following molecules (prefixes!)

sulfur dioxide		2. CO	
3. phosphorous trifluoride	<u>.</u>	4. SCI ₆	<u>.</u>
5. carbon tetrachloride	<u>.</u>	6. As ₂ S ₃	<u>.</u>
7. carbon dioxide	<u>.</u>	8. CF ₄	<u>.</u>
9. dichlorine monoxide	<u>.</u>	10. water	<u>.</u>
11. nitrogen dioxide	<u>.</u>	12. OF ₂	<u>.</u>
13. nitrogen oxide		14. Asl ₅	<u> </u>
		15. IF ₇	<u>.</u>

NOMENCLATURE SET 2 A IONIC, MOLECULAR and POLYATOMIC

Ionic and Molecular Compounds:

Determine whether each of the following is an ionic or molecular compound and provide the name or formula using the correct system (IUPAC or prefix)

1. HCl	<u>.</u>	2. nitrogen gas	<u>.</u>
3. H ₂ S	<u>.</u>	4. gallium carbide	<u>.</u>
5. SrO		6. magnesium oxide	
7. Ga ₂ O ₃	<u> </u>	8. chlorine heptaiodide	
9. PbCl ₄	<u>.</u>	10. calcium sulfide	<u> </u>
11. CO	<u> </u>	12. aluminum phosphide	
13. Ba ₃ N ₂		14. hydrofluoric acid	<u>.</u>
15. Ni₂C	<u>.</u>	16. diphosphorus trisulfide	
17. H ₂ O	<u>.</u>	18. strontium nitride	
19. Cs ₃ N		20. calcium phosphide	<u>.</u>

Polyatomic Compounds:

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1. CaSO ₄	<u>.</u>	2. lithium sulfate	<u> </u>
3. Zn(OH) ₂		4. potassium chlorite	<u>-</u>
5. AIPO ₄		6. silver nitrite	
7. RbNO ₃		8. sodium carbonate	<u> </u>
9. Na ₂ SO ₃		10. strontium nitrite	
11. KClO ₃		12. magnesium bicarbonate	
13. Ag ₃ PO ₄		14. calcium phosphate	
15. NaOH		16. lithium carbonate	
17. Al(NO ₃) ₃		18. silver hydroxide	

NOMENCLATURE SET 2 B IONIC, MOLECULAR and POLYATOMIC

Ionic and Molecular Compounds:

Determine whether each of the following is an ionic or molecular compound and provide the name or formula using the correct system (IUPAC or prefix)

1. hydrogen chloride	<u>-</u>	2. N ₂	
3. hydrogen sulfide	<u>.</u>	4. Ga ₄ C ₃	<u> </u>
5. strontium oxide		6. MgO	<u>-</u>
7. gallium oxide		8. ClI ₇	
9. lead (IV) chloride		10. CaS	
11. carbon monoxide		12. AIP	
13. barium nitride		14. HF	
15. nickel (II) carbide		16. P ₂ S ₃	<u>-</u>
17. water	<u> </u>	18. Sr ₃ N ₂	<u>-</u>
19. cesium nitride	<u>-</u>	20. Ca ₃ P ₂	<u> </u>

Polyatomic Compounds:

calcium sulfate		2. Li ₂ SO ₄	<u> </u>
3. zinc hydroxide	<u>.</u>	4. KCIO ₂	<u>-</u>
5. aluminum phosphate		6. AgNO ₂	<u>.</u>
7. rubidium nitrate		8. Na ₂ CO ₃	<u>.</u>
9. sodium sulfite		10. Sr(NO ₂) ₂	<u>.</u>
11. potassium chlorate	<u>.</u>	12. Mg(HCO _{3.}) ₂	<u>.</u>
13. silver phosphate		14. Ca ₃ (PO ₄) ₂	<u>.</u>
15. sodium hydroxide		16. Li ₂ CO ₃	<u> </u>
17. aluminum nitrate		18. AgOH	