

BINARY COVALENT COMPOUNDS

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Binary: Contain 2 elements

Covalent: Nonmetal + Nonmetal

Compounds: Have more than one type of atom

BINARY COVALENT COMPOUNDS

Prefix: Written before the word

1. mono-

2. di-

3. tri-

4. tetra-

5. penta-

6. hexa-

7. hepta-

8. octa-

9. nona-

10. deca-

BINARY COVALENT COMPOUNDS

Naming Rules:

- First Element: Keeps name
* do not use mono-
- Second Element: Change ending to "-ide"
- Example: H_2O Dihydrogen monoxide

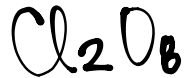
BINARY COVALENT COMPOUNDS

- a. NO nitrogen monoxide
- b. N₂O dinitrogen monoxide
- c. NO₂ nitrogen dioxide
- d. P₂O₃ diphosphorus trioxide
- e. P₂O₅ diphosphorus pentoxide
- f. SF₆ sulfur hexafluoride

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Writing Formulas:

- Do **NOT** use the crossover method
- The prefix is the subscript for the element it is attached to
- Example: Dichlorine octaoxide



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- a. Nitrogen Tribromide NBr₃
- b. Hexaboron Monosilicide B₆Si
- c. Chlorine Dioxide ClO₂
- d. Iodine Pentafluoride IF₅
- e. Diphosphorus Pentoxide P₂O₅
- f. Disulfur triiodide S₂I₃

BINARY COVALENT COMPOUNDS

Diatomic Element: Elements that exist naturally in pairs

*BRINCEHOF

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Diatomic Elements:

a. Br_2 Bromine e. H_2 Hydrogen

b. I_2 Iodine f. O_2 Oxygen

c. N_2 Nitrogen g. F_2 Fluorine

d. Cl_2 Chlorine