

Covalent Nomenclature Worksheet

I. Write the formula for each of the compounds.

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|--------------------------|-------------------------|
| 1) hydrogen peroxide | 6) sulfur(VI) fluoride |
| 2) nitrogen(I) oxide | 7) diarsenic trisulfide |
| 3) hydrogen bromide | 8) dihydrogen sulfate |
| 4) diselenium dichloride | 9) phosphorus(V) oxide |
| 5) diiodine dichloride | 10) carbon(IV) bromide |

II. Use both the Stock System and the Traditional System to name the following compounds.

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|----------------------------------|------------------------------------|
| 1) NO | 6) N ₂ O ₃ |
| 2) PCl ₃ | 7) Cl ₂ O ₃ |
| 3) N ₂ O ₅ | 8) CO |
| 4) IF ₇ | 9) SO ₃ |
| 5) BiBr ₃ | 10) Cl ₂ O ₇ |

Solutions

I. Write the formula for each of the compounds.

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|-----------------------------|------------------------------|
| 1) H_2O_2 | 6) SF_6 |
| 2) N_2O | 7) As_2S_3 |
| 3) HBr | 8) H_2SO_4 |
| 4) Se_2Cl_2 | 9) P_4O_{10} |
| 5) I_2Cl_2 | 10) CBr_4 |

II. Use both the Stock System and the Traditional System to name the following compounds.

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|---|--|
| 1) nitrogen(II) oxide
nitrogen monoxide | 6) nitrogen(III) oxide
dinitrogen trioxide |
| 2) phosphorus(III) chloride
phosphorus trichloride | 7) chlorine(III) oxide
dichlorine trioxide |
| 3) nitrogen(V) oxide
dinitrogen pentaoxide | 8) carbon(II) oxide
carbon monoxide |
| 4) iodine(VII) fluoride
iodine heptafluoride | 9) sulfur(VI) oxide
sulfur trioxide |
| 5) bismuth(III) bromide
bismuth tribromide | 10) chlorine(VII) oxide
dichlorine heptaoxide |