

Name Answers period ___ Date ___

Naming Molecular Compounds Worksheet #1

Molecular compounds are made of nonmetals atoms bonded together by sharing electrons. There are NO IONS and NO CATIONS involved in covalent bonding. When we name any molecular compound, we need to find the name of each element in the compound and to know the prefixes for the total number of atoms of each element in the compound.

1: Name each molecular compound below.

- P_2F_6 triphosphorus hexafluoride NO nitrogen monoxide
- BrF_3 bromine trifluoride $SiCl_4$ silicon tetrachloride
- SO_2 sulfur dioxide I_2F_6 iodine hexafluoride
- N_2O_5 dinitrogen pentoxide NCl_3 nitrogen trichloride
- N_2H_4 dinitrogen tetrahydride SF_6 sulfur hexafluoride

Write the formula of each molecular compound.

- Triboron monoxide B_3O
- Nitrogen dioxide NO_2
- Sulfur hexafluoride SF_6
- Pentaoxygen dichloride Cl_2O_5
- Diboron heptoxide B_2O_7
- Iodine monobromide IBr
- Phosphorus pentachloride PCl_5
- Iodine heptafluoride I_2F_7

Number	Prefix
1	mono-
2	di-
3	tri-
4	tetra-
5	penta-
6	hexa-
7	hepta-
8	octa-
9	nona-
10	deca-

Also:

- Carbon tetrachloride CCl_4
- Diphosphorus trioxide P_2O_3
- Octanegen tetrasulfide S_8O_4
- Phosphorus tribromide PBr_3
- Carbon tetraoxide CO_4
- Dinitrogen hexoxide N_2O_6
- Carbon monoxide CO

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Name _____

Naming molecular compounds

Name the following molecular compounds:

- CCl_4 carbon tetrachloride
- CO carbon monoxide
- P_2O_5 diphosphorus pentoxide
- SF_6 sulfur hexafluoride
- ClF_3 chlorine trifluoride
- N_2O_3 dinitrogen trioxide
- P_4O_{10} tetraphosphorus decoxide
- C_3H_4 tricarbon tetrahydride
- C_2H_4 dicarbon tetrahydride
- SO_2 sulfur dioxide
- CO_2 carbon dioxide
- CO carbon monoxide
- Cl_2 chlorine
- ICl iodine monochloride
- CS_2 carbon disulfide
- NBr_3 nitrogen tribromide
- SI_2 sulfur diiodide
- Cl_2O dichlorine monoxide
- $SeCl_2$ selenium dichloride
- H_2O dihydrogen monoxide

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Naming Covalent Compounds Worksheet

Write the formulas for the following covalent compounds:

- antimony tribromide $SbBr_3$
- hexaboron silicide B_6Si
- chlorine dioxide ClO_2
- hydrogen H_2
- iodine pentafluoride I_2F_5
- dinitrogen trioxide N_2O_3
- ammonia NH_3
- phosphorus triiodide PI_3

Write the names for the following covalent compounds:

- P_2S_5 tetraphosphorus pentasulfide
- NO_2 nitrogen dioxide
- SeF_6 selenium hexafluoride
- Si_2Br_6 diboron hexabromide
- SCl_4 sulfur tetrachloride
- CH_4 carbon tetrahydride
- B_2Si diboron monosilicide
- NF_3 nitrogen trifluoride

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